Beyond Buzzwords: Exposure in College Students' Cultural Competence Development

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the Degree of Doctor of Philosophy

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DEDICATION

Forever.

To my incredible husband, partner, and soulmate, JT Peifer. Without your love, none of this would have been possible.

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I have been fortunate to have countless strong women in my life who embody persistence and brilliance. Of all these women, my mother, Dr. Natalie N. Summerville, stands alone. Throughout my entire life, she modeled poise, passion, and ingenuity. For all of her kindness and unwavering, steady support I feel grateful to count her as a not only a parent, but also as a best friend. I love you, lady.

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Jozanne, Juston, and Jurrand: Hands down, you are the best siblings in the world. I look forward to a lifetime of connection and shared memories. Thank you for being with me every step of the way and for always taking for granted that I would *obviously* succeed (even when I did not believe it myself).

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LINKING DOCUMENT

In an increasingly interconnected and multicultural world, cultural competence has become essential for students' post-graduate occupational and social success (Nieto, 2009). Higher education institutions (HEIs) must prepare students to thrive in environments that are rich with religious, racial, and ethnic diversity (Barth, Godemann, Rieckmann, & Stoltenberg, 2007). Above and beyond its sheer necessity, cultural competence has been linked with a number of beneficial outcomes. These include more successful intercultural collaboration (Wilson, Ward, & Fischer, 2013), enhanced creativity and self-expression (Leung, Galinsky, & Chiu, 2008), lower prejudice (Lawrence & Tatum, 1997), and improved psychological health (Seaton, Scottham, & Sellers, 2006). In higher education, diversity has been linked with increased intellectual self-confidence, retention, and students' overall satisfaction with their college experience (Chang, 2001).

In line with societal trends, student body diversity has grown exponentially in the past decade (Kuh, Kinzie, Schuh, & Whitt, 2011). From 2001 to 2011, minority students grew from only 16% to 39% of post-secondary enrollment (US Department of Education, 2013). Students encounter more diversity than ever before in formal classroom settings and informal arenas (e.g., residence halls, social events) (Gurin, Dey, Hurtado, & Gurin, 2002). As campuses have become more diverse, institutional objectives have shifted as well (Jones & deWit, 2010). Sixty-three percent of colleges and universities in the United States reference cultural competence-related objectives within their institutional mission statements (Krajewski, 2011). Gurin, Dey, Hurtado, and Gurin (2002), emphasized the impact of diversity on classroom diversity and cross-cultural interactions on student learning, civic engagement, and social growth. Although cultural competence development is a widespread goal, there is little consensus in academic literature on its definition, as well as how institutions can best facilitate its development.

Defining Cultural Competence

Over the past 40 years, researchers have explored the conceptualization and measurement of college students' cultural competence (Hammer, Gudykunst, & Wiseman, 1978; Hunter, 2004). In light of the many factors that can lead to multicultural beliefs, knowledge, and interactions, research on cultural competence has yet to produce a single definition for the concept (Wilson, Ward, & Fischer, 2013). Nonetheless, there are discernable common elements across the various definitions of college students' cultural competence. Adapting Sue and Torino (2005) and Hunter, White and Godbey's (2006) models of cultural competence, the compiled manuscripts explore three central facets of college students' cultural competence: 1) self-awareness, 2) perceptions and knowledge, and 3) skills. The first facet, self-awareness, encompasses the way students make sense of themselves as cultural beings. The second factor, perceptions and knowledge, refers to how students intellectually make sense of their place in the world. Finally, skills represent to the ability to translate these concepts into action through lived experiences. Across studies, the terms intercultural, cross-cultural, and cultural competence (or fluency) refer to students' interest in, knowledge about, and skills needed to interact with culturally-different others.

Cultural Competence Development in Higher Education

The higher education environment lends itself to cultural competence development for several reasons. For one, the college years often coincide with a developmental period—emerging adulthood—that occurs between the ages of 18 and 25 (Arnette, 2000; Gurin, Dey, Hurtado, & Gurin, 2002). Throughout this dynamic time of exploration and growth, young people work to establish their independent sense of selves as adults (Arnette, 2000). Emerging adults form views about themselves and others while exploring their values and worldviews

(Eccles, Templeton, Barber, & Stone, 2003). Because of this, higher education institutions have a powerful opportunity to impact students' cultural competence development in a lasting way (Deardorff, 2006; Kitsantas, 2004).

Additionally, HEIs offer various pathways to cultural competence development (Cushner, 2007). In college, most students encounter more cultural diversity than ever before (Pascarella, 2006). Institutions have begun to capitalize on the distinct academic and social aspects of the college environment to foster students' cultural competence development (Jones & de Wit, 2012). Despite these opportunities, higher education institutions (HEIs) still struggle to find financially and logistically feasible ways to build cultural competence (Bellamy & Weinberg, 2006; Lustig & Koester, 2003). The compiled research responds to this need. The three studies explore various institutional, individual, and exposure variables that may play a role in how students develop three distinct forms of cultural competence: religious, ethnic/racial, and global cultural competence.

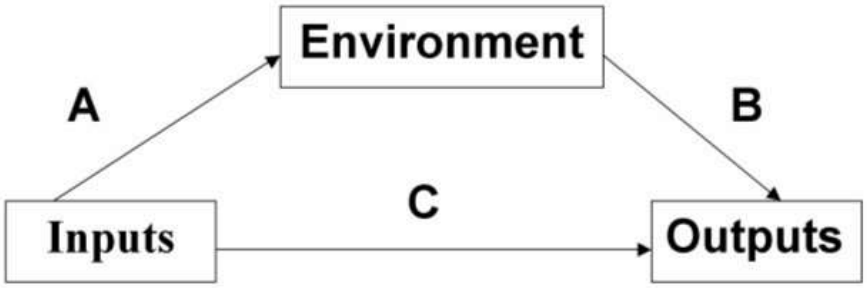
Unifying Model

The manuscripts examine college students' cultural competence development in various ways. Astin's (1993) Input-Environment-Outcomes (I-E-O) college student development model unifies and connects the three studies (Figure 1). Alexander Astin (1993) developed the I-E-O model to guide outcome assessments within HEIs' non-randomized research environment. This analytical model explores student and institutional outputs, or outcomes that are influenced by characteristics that students have before attending college and their experiences in the higher education environment. The I-E-O model has been applied to understand a range of both student and institutional outcomes (Strayhorn, 2012; Zhai & Scheer, 2002; Thompson, 2008)

The I-E-O model includes inputs (i.e., traits students bring with them to college), environment (i.e., experiences and interventions students have in college), and outputs (i.e., the characteristics, behaviors, and skills that students develop while in college; Astin, 1993b). Outputs encompass "aspects of the student's development that the college either does influence or attempts to influence," including outcomes such as "student's achievement, knowledge, skills, values, attitudes, aspirations, interests and daily activities." (Astin, 1970 p. 4) Astin's theory of student involvement highlights the key role of extracurricular in social relationships in students' outcomes (Astin, 1984).

In this dissertation's presented manuscripts, inputs include a range of individual-level variables (e.g., age, gender, foreign language fluency). The environment construct refers to "the student's actual experiences during the educational program," at an HEI, including academic, social, and extracurricular activities (Astin, 1993, p. 18). Within the dissertation, the three studies incorporated HEI environmental factors such as the institution's region, student body diversity, and globally-related experiences. For the purposes of this dissertation, the outputs, or the student outcomes that HEIs hope to achieve, include religious, ethnic/racial, and global cultural competence (Astin, 1993).

Figure 1. Astin's Input-Environment-Outcome (I-E-O) Model



The Three Manuscripts

The first study, *College Students' Perceptions of Women's Rights in Islam: The Impact of Individual Demographics, Institutional Characteristics, and Exposure*, examined differences between Muslim and non-Muslim students' perceptions of gender equity in Islam. The output of interest for the study was students' perceptions, a foundational element of this type of religious cultural competence. The research focused on differences in perceptions based on individual demographic variables, or inputs, including: Muslim v. non-Muslim religious affiliation, age, gender, and race/ethnicity. It also examined institutional characteristics (i.e., geographic region and student body diversity) and exposure variables (i.e., academic, social, travel-based variables) conceptualized as environmental variables in the I-E-O model.

In a sample of 397 college students from 84 HEIs, I examined US college students' perceptions of gender equity in Islam. I utilized a measure developed for the study: the Women's Rights in Islam Scale (WRIS). Linear regression analyses indicated that Muslim students perceived more gender equity in Islam than non-Muslim students. More specifically, Muslim women held perceived a greater degree of gender equity in Islam than Muslim men did, and non-Muslim women perceived less gender equity in Islam than non-Muslim men did. Exposure to Muslim culture through coursework, friendships, residence in a predominantly Muslim country impacted non-Muslim students' views. Non-Muslim students with more exposure perceived more gender equity in Islam than non-Muslim students with less exposure. In summary, findings from this paper suggest exposure plays a significant role in how out-group members perceive one element of Islam. With this in mind, institutional support for academic, social, and study abroad opportunities may play a significant role in college students' perceptions, and in turn, in the development of students' religious cultural competence.

The second study, *The Culture of Mentoring: Ethnic Identity for Minority Mentees Paired with Majority and Minority Group Mentors,* investigated college students' racial/ethnic cultural competence (outputs in the I-E-O model). The study utilized a sample of 95 dyads that included college women mentors who were engaged in a service-learning course and mentoring program with middle school girls (environment). The study assessed the association between mentors and mentees' ethnic identities, exploring the association based on majority/minority status (inputs) and mentors' ethnocultural empathy (i.e., their self-reported ability to understand feelings of individuals from cultural backgrounds different from themselves). Findings from a series of linear regressions revealed that mentors' ethnocultural empathy and ethnic identity exploration and commitment were associated with minority group mentees' ethnic identity exploration. Contrary to my expectations, the statistical interaction between ethnic identity and match status was not significant. This suggested that mentees' ethnic identity scores did not depend on being in a majority-minority or minority-minority mentoring pair. The findings highlighted both intra- and interpersonal cultural competence development for college students. They also underscored a need for intentional, institutional support for ethnic identity exploration in mentoring relationships.

The final study, *Individual Characteristics and Institutional Opportunities Associated with College Students' Global Cultural Competence Development,* included the global cultural competence of 95 college women as the output of interest. Within the I-E-O model, the study incorporated the input of students' foreign language fluency. Students' individual characteristics (i.e., responsible citizenship and collective self-esteem) served as covariates. The study also examined the role of environment, or the globally-related academic and social experiences of students (travel and non-travel based). A series of hierarchical linear regressions allowed for

comparisons between travel and non-travel based experiences, controlling for foreign language fluency and individual characteristics. Foreign language fluency, collective self-esteem and students' globally-related travel, academic, and social experiences were all linked with global competence. Controlling for all other variables, globally-related social experiences (i.e., the impact of having friends from a different home country) was associated with global competence.

Conclusions

Findings from the three studies presented support a central conclusion: The higher education experience plays a role in college students' cultural competence development. The results from the studies can be interpreted within the framework of Astin's (1993) input-environment-output model. As expected, the inputs, or characteristics students bring with them to college, influence their cultural competence development. Additionally, the particular academic and social experiences provided by a higher education institution can impact how students develop their religious, ethnic/racial, and global competencies. In sum, my research extends and underscores the key role that the higher education environment can play in fostering the output of cultural competence—especially through students' lived academic and social experiences.

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College Students' Perceptions of Women's Rights in Islam: The Impact of Individual Demographics, Institutional Characteristics, and Exposure

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Abstract

The study examined whether higher levels of exposure to Muslim culture related to greater perceptions of gender egalitarianism in Islam. It assessed the association between perceptions of women's rights in Islam and US college students' (n = 397) individual demographic variables (i.e., Muslim v. non-Muslim religious affiliation, age, gender, and race/ethnicity), exposure (i.e., academic, social, travel-based), and institutional characteristics (i.e., geographic region and student body diversity). Results indicated that Muslim students perceived more gender equity in Islam than non-Muslim students. More specifically, Muslim women perceived a greater degree of gender egalitarianism in Islam than Muslim men and non-Muslim women perceived less gender egalitarianism in Islam than non-Muslim men. Exposure to Muslim culture—through coursework, friendships, or residence in predominantly Muslim country — impacted non-Muslim students' views. Non-Muslim students with more exposure perceived a greater degree of gender egalitarianism in Islam than non-Muslim students with less exposure. These results are discussed considering the implications for higher education institutions (HEIs) in the United States.

College Students' Perceptions of Women's Rights in Islam: The Impact of Individual Demographics, Institutional Characteristics, and Exposure

Islamic laws and their implications for Muslim life became a contentious subject of public discourse in the United States during the post-September 11th era (Nasir & Al-Amin, 2006). The effect of Islamic doctrine on the treatment of women garnered attention in the media and academic research alike (Nasir & Al-Amin, 2006). Between 2000 and 2010, Amer & Bagasra (2013) found a 983% increase in the number of media publications that referenced "Islam" or "Muslims." While some reports offered a historicized and nuanced portrayal of women's rights in Islam, others engendered bias, distrust, and fear by presenting Islam in a unidimensional way (Bail, 2012). Despite the separation between mainstream Islam and more radical extremism, many US citizens formed negative perceptions of Islam and its treatment of women in the post-September 11th era (Zelizer & Allan, 2011). Considering this and the fact that followers of Islam compromise nearly 21 percent of the world's population—seven million in the United States alone—a better understanding of how U.S. citizens perceive Muslim women's rights has become increasingly important (Pew Research Center, 2011).

Views of Islam in the United States

The events of September 11th heightened interest in Islam across the United States (Zelizer & Allan, 2011). In the new context of the War on Terror, negative biases against Islam became increasingly popular (Kapur, 2002). From 2000 to 2001, violent crimes against Muslims rose markedly. Reports of religiously- and/or ethnically-based violence were greater for Muslim and Arabic people than the combined reported hate crimes victimizing gay, Jewish, and Black people (Singh, 2002). On a broader scale, governmental policies targeted Muslims for increased investigation in ways that heightened police profiling (Harcourt, 2006).

Nonetheless, if we assume that increased familiarity with Islam as a religion and a community is associated with more positive Muslim and non-Muslim relations in the United States, then several indicators suggest the potential for more positive relations between Muslims and non-Muslims. Conversions to Islam and general interest in learning more about the Qur'an and Islamic doctrine have surged in the past decade (Al-Hayat, 2001). University and college interest in Islam has also grown in recent years. In addition, the proportion of Muslim residents of the United States is higher than ever before (Curtis, 2009).

Given the variance in beliefs about Islam and Muslim culture, Kandiyto (1991) suggests that exploring a subset of young adults' beliefs can be informative and influential. During the college years, many students are at a developmental period of emerging adulthood (Arnette, 2000; Gurin, Dey, Hurtado, & Gurin, 2002). Throughout this time of exploration young adults establish their sense of selves, values, and worldviews (Eccles, Templeton, Barber, & Stone, 2003; Arnette, 2000). Considering this, colleges and universities can play a significant role in scaffolding students through this period (Deardorff, 2006; Kitsantas, 2004). The following sections address the multifaceted debate regarding women's rights in Islam, focusing, on individual, institutional, and exposure considerations that may impact perceptions of Islamic doctrinal values regarding gender.

Debate on Women's Rights in Islam

People of the Muslim faith compose a heterogeneous group of varied ethnicities, cultural backgrounds, and ethnocultural practices. This diversity renders generalizations in research difficult to draw (Zaal, Salah, & Fine, 2007). As in other religions, Muslim scholars and followers have varied interpretations of religious laws and their implications for gender rights (Barlas, 2002). Some perceive more gender equity in Islam (Badawi, 1995), while others see less

(Moghadam, 1991). For the purposes of this paper, gender egalitarianism and equity are used instead of equality. As stated by Badawi (1995):

> The term equity is used instead of the common expression 'equality" which is sometimes mistakenly understood to mean absolute equality in each and every detailed item of comparison rather than the overall equality. Equity is used here to mean justice and overall equality of the totality of rights and responsibilities of both genders. It does allow for the possibility of variations in specific items within the overall balance and equality. It is analogous to two persons possessing diverse currencies amounting, for each person to the equivalence of US$1000. While each of the two persons may possess more of one currency than the other, the total value still comes to US$1000 in each case. It should be added that from an Islamic perspective, the roles of men and women are complementary and cooperative rather than competitive.

The perspectives presented here attempt to capture only a small portion of the varied conceptions of gender equity in Islam based on Muslim law, held by members of the Muslim faith. Fundamental Muslim belief holds that Islamic doctrine is conveyed in several ways. The Qur'an functions as the literal word of God and guides all aspects of life. The Sunnah supplements the Qur'an with the Prophet Muhammed's statements and actions, outlining habits and life choices that embody holiness and righteousness.

The Shari'a evolved after the Prophet Muhammed's death in 632 AD (Hodgson, 1988). It serves as legislation based on the Qur'an and Sunnah and provides additional information on religious law, requirements, and customs. Each of these ordained texts addresses women's status in complex ways, providing instructions, commentary, and guidance on all aspects of life, including women's educational, social, and fiscal liberties (Waines, 1982).

Norris and Inglehart (2002) posit that some of the primary divisions and tensions between Muslim and non-Muslim societies center around the rights of women. Some countries highlight interpretations of the Qur'an that grant expansive rights to women (Engineer, 2008), while others derive more restrictive interpretations (Silverman, 1995). To understand women's status in Muslim societies, one must look to their cultural, political, and social milieus rather than the beliefs of Islam alone. For example, Yemeni culture reflects a less egalitarian interpretation of religious texts regarding women's rights and has a Gender Equality Index (GEI)[1] of .769 ranking them 146 out of 187 (Social Watch, 2012). Similarly, Iranian and Libyian governments have adopted similar interpretations of Sharia law. For instance, women often cannot get custody of their children after a divorce based on subjective readings of the Qur'an on women's rights (Letcher, 2008).

In contrast, Jordan and Turkey have adopted more egalitarian interpretations and women there have greater access to social, educational, and personal liberties than some other predominantly Muslim countries (Haddad & Lumis, 1987). Scholars with more egalitarian interpretations emphasize key passages in the Qur'an that suggest faith rather than gender determines status within Islam (El-Safty, 2004). They also highlight the importance of women as the core of a family's strength and stability in Islam, deemphasizing subservience to men (Mehran, 1999).

Higher Education and College Students' Perceptions

In the last decade, higher education institutions (HEIs) have prioritized cultural awareness and internationalization for many reasons (Marginson, 2008; Wood, 2012). One of the

[1] The Gender Equality Index (GEI) synthesizes six central domains of gender equality (work, money, knowledge, time, power, health) and two additional domains (intersecting inequalities and violence) to create a composite score for countries that ranges from 1 (Inequality) to 100 (Equality).

major impetuses for this shift has been the boom of globalization in the occupational landscape (Lee, Poch, Shaw, & Williams, 2012). To build cultural competence, HEIs provide lived experiences and exposure both inside and outside of the classroom. For example, Pierce (2007) found that study abroad experiences increase students' acceptance of difference. Moreover, academic experiences bolster perceptions of out-group individuals and lead to more positive, later-life interactions with different cultural groups (Pang, 2001; Novak, Whitehead, Close, & Kaplan, 2004).

The American college experience tends to liberalize student's gender-role attitudes. Findings reveal that college students' attitudes towards women's rights become more egalitarian over the period of time that they are in college (Astin, 1993; Lottes & Kuriloff, 1994). Research by Johnson & Lollar (2002) found that increased availability of multicultural experiences, exposure, and courses impacted the way that students perceive the intersection of Islam and women's rights. Similarly, Allport's (1954) intergroup contact hypothesis (ICT) explores how contact (or exposure) shapes the way subjects interact and view one another's cultural group (Pettigrew, 2004). ICT suggests that while mere exposure to another group can lead to prejudice reduction, both individual and institutional demographics also play a role in whether or not people benefit from their exposure to new cultural groups (Allport, 1954). More specifically, ICT identified four key factors: 1) equal status, 2) common goals, 3) intergroup cooperation, and 4) institutional support (Pettigrew, 2004). The university environment is uniquely positioned to foster all of these factors (Hurtado, Milem, Clayton-Pedersen, Allen, 1999; Gurrin, Dey, Hurtado, Gurin, 2002).

In addition to a college's commitment to general multicultural education, research suggests that the presence of Islamic student groups and existence of Islamic studies faculty

influences students' experiences and perceptions of Islam and its laws (Nasir & Al-Amin, 2006). Specifically, the availability of coursework relating to Islam and Muslim cultures may play a role in the way that students perceive Islam and women's privileges within the religion. ICT has been applied successfully in the university environment to heighten cross-racial/ethnic cultural competency (Rothbart & John, 2010). However, the theory has not been substantially explored for religiously different individuals (e.g., Muslim and non-Muslim students). Moreover, religious diversity has not received the level of attention or exploration that racial/ethnic diversity has (Amer & Bagasra, 2013).

The specific HEI students attend shapes their opportunities for intergroup contact and exposure. On the whole, campuses are more diverse than ever before (Carnevale & Fry, 2000) and, students encounter a wider breadth of people from different cultures (Nieto, 2000). Students also tend to have greater access to classes with a cultural focus than they did during their secondary schooling (Johnson, 2002). These opportunities align with a developmental period during which students actively negotiate their identity in a way that molds their future actions and beliefs (Waterman, 1982).

Finally, over 60% of high school students in the United States go on to pursue a post-secondary degree. College students represent an ever-growing segment of American young adults (Economic News Release, 2011). Focusing on their perceptions of women's rights in Islam provides a snapshot of current views. It also offers a glimpse into the evolving socio-cultural perspectives of future citizens and leaders of the United States.

Current Study

Study Rationale and Significance. Increased availability of multicultural experiences and courses can impact cross-cultural interactions and the way students perceive women's rights

(Johnson & Lollar, 2002). To date, religious diversity has not received adequate attention (Amer & Bagasra, 2013), but current social and cultural realities necessitate renewed exploration. In many ways, non-Muslims in the US view Islam and women's rights within it in a wholly negative way (Zelizer & Allan, 2011). Biased perceptions of another culture can negatively impact health and student learning. This study takes an initial glimpse into the role of individual, institutional, and exposure variables in college students' perceptions of gender equity in Islam. Research on students' current perceptions of women's rights in Islam can help inform ways that HEIs approach this segment of students' religious cultural competence.

Potential Variables of Influence. Pettigrew (2004) identified individual factors (e.g., geographical region of residence, openness to new experiences, and experience with diversity) that play a role in shaping the outcomes of intergroup contact (Adler, 1983; Homan, et al. 2008; Mendenhall & Oddou, 1986). Moreover, Waterman (1982) suggested an intersectional model of identity development for college students that incorporated their year and gender. Considering this, several individual demographic variables (age, gender, Muslim verus non-Muslim religious affiliation) may influence university students' perceptions of women's rights in Islam.

Institutional characteristics can also impact students' cultural attitudes and competencies (Gurin, 1999; Hu and Kuh, 2003; Hurtado, Enberg, et al., 2002; Laird, Engberg, & Hurtado, 2005). Thus, the current study will assess geographic region and student body diversity as key institutional characteristics. By extension, ICT suggests that out-group students' academic and social exposure to a new culture can influence perceptions (Pettigrew, 2004). Thus, non-Muslim students' experiences with Muslim culture, through academic, coursework, and social outlets, may play a role in overall beliefs about gender equity in Islam.

Research Questions and Hypotheses. The study responded to the following questions about US college students' perceptions of women's rights in Islam:

1. Are there differences between Muslim and non-Muslim college students' perceptions of gender equity in Islam?
2. What associations exist among perceptions of women's rights in Islam, individual demographics (age, Muslim v. non-Muslim religious affiliation, gender, race/ethnicity), and institutional characteristics (region and student body diversity)?
3. For non-Muslim students, does exposure to Muslim culture affect perceptions?

We predicted that Muslim students would perceive more gender egalitarianism than their non-Muslim peers. In addition, we hypothesized that students' gender, and race/ethnicity and the diversity index score of their HEI will be associated with perceptions.

Methods

Measures

Women's Rights in Islam Scale (WRIS). A review of the literature failed to identify any instruments that adequately assessed US college students' perceptions of women's rights in Islam. Because of this, a questionnaire was developed specifically for this study. To guide item selection, the research team reviewed religious texts (i.e., verses from the Qur'an and the current Sunna) as well as analyses of key components of women's rights. This process led to the creation of a 40-item measure exploring women's rights, roles, and privileges. After drafting the measure, the team recruited a diverse group of scholars on Islam to review the items for content and face validity. These reviewers included professors of Islam, Muslim educators, and non-Muslim faculty members with an interest in gender roles and rights. The measure was then piloted with a

convenience sample of twenty undergraduate and graduate students of Muslim and non-Muslim backgrounds from universities in the United States. The pilot participants ranged in age from 20-24. Participants were asked to provide feedback on the wording, content, and length of the measure and final modifications to the measure were made accordingly.

The final Women's Rights in Islam Scale (WRIS) (see: Appendix A) consists of 40 items that assess respondents' assumptions about gender egalitarianism in Islam. Participants responded to statements using a 5-point Likert scale (strongly disagree, disagree, neutral, agree, strongly agree). Items reported their perceptions of women's rights across three domains: educational (e.g., "according to Islam, women should be given the same opportunities to pursue knowledge as men"), social (e.g., "in Islam, a woman has a right to choose if she wants to get married"), and financial/professional (e.g., "men and women in Islam are given equal opportunities to professional career development."). The modified version of this scale showed good internal consistency, with a Cronbach's alpha of .96 (Nunnaly & Bernstein, 1994). The overall mean of the Women's Rights in Islam Scale (WRIS) was 3.60 (SD = .81) for the full sample.

Individual Demographics. In addition to the WRIS, the study collected four individual demographic variables: age, religious affiliation (Muslim v. non-Muslim), gender (male or female), and race/ethnicity (i.e., African-American, Asian-American or Pacific Islander, Caucasian-American, Hispanic-American, Middle Eastern-American, Native American, and Other). The age variable was organized into categorical groupings (1 = 17-19, 2 = 20-21, 3 = 22-24, 4 = 25-27, 5 = 28, 6 = Other) (See Table 1.)

Institutional Characteristics. Two institutional characteristics were included in the study: geographic region and diversity index score of the participants' university. Given the clustering

of the sample, geographic region was classified into three major categories: North, South, and Midwest. The US News and Reports Diversity Index (Meyer & McIntosh, 1992) was used to assess each institution's level of ethnic/racial heterogeneity. The Diversity Index (Meyer & McIntosh, 1992) calculates proportion of minority students from reported enrollment data from the 2009-2010 academic years on a scale from 0.0 (totally homogenous) to 1.0 (totally heterogeneous). Scores closer to 1.0 represent higher diversity, indicating a higher proportion of individuals from different ethnic backgrounds. Ethnic/racial categories on the Diversity Index include: American Indians and Native Alaskans, Asian-Americans and Pacific Islanders, non-Hispanic African Americans, non-Hispanic Caucasian Americans, and Hispanic Americans. Public or private status of the participants' institution was determined by a review of the individual institutions official website. Our sample's Diversity Index Scores ranged from .20 - .74 and were grouped into three categories: Low (.00-.25), Mid (.26-.50), and High (.51 - .75). Table 1 compiles frequencies for these institutional variables.

Exposure. Three items were used to assess non-Muslim students' exposure to Muslim culture. Participants were asked to indicate "yes" or "no" if they had ever: 1) taken at least one course on Islam, 2) had Muslim friends, and 3) lived in a predominantly Muslim culture. The total of the three items was calculated for an exposure score that ranged from 0 to 3. (See Table 1)

Participants

Recruitment. In the first stage of recruitment, the research team compiled a comprehensive list of Muslim organizations at 84 colleges and universities in the United States and initial contact was made through these organizations. Organizations then distributed the recruitment message by email to other general student groups and institutional electronic mailing

groups. Initial sites were chosen based on the location of the university, with the aim of recruiting participants from a variety of states and regions. Next, recruitment targeted universities with Arabic departments. Finally additional participants were recruited by emailing university professors involved in studies related to Muslim culture or Islam. Once recruitment was completed, a list of contact information for all interested students was compiled and they were sent the QuestionPro survey link via email. The recruitment email message outlined basic information about the study and encouraged participants to distribute the survey to other university students regardless of their cultural background or religious affiliation.

Sample. A total of 879 students viewed, 464 started, and 397 completed the survey. A large proportion of the sample was female (71%). Most participants identified as Caucasian (42%), with smaller percentages identifying as Middle Eastern (22.8%), Asian/Pacific-Islander (16%), African American (9.8%), Other (4.5%), and Native American (1%). Most of the sample identified as non-Muslim (61%). Non-university or college students (e.g., high school students) and individuals not living in the United States were removed from the sample prior to analysis, making the final sample 359. Table 1 provides a more thorough breakdown of the demographic characteristics of participants.

Procedure

Each participant received standard information about the length of the survey, a brief background and purpose of the study, and a request for candid responses based on his or her personal understanding of Islam. Additionally, participants were informed that their responses would remain confidential and given information on how to contact the research team if they had questions or concerns. Participants accessed the QuestionPro online survey administrator independently; the survey took no more than a half hour to complete.

Results

Given the use of a convenience sample, the first analytic step was to determine if the Muslim and non-Muslim students included in the sample differed on the variables of interest. A multivariate analysis of variance (MANOVA) was conducted and revealed significant differences on two individual (gender and ethnicity) and two institutional (region and diversity index score) variables of interest (see Table 2). The inter-correlations between study variables are presented in Table 3. To determine if there were differences between Muslim and non-Muslim college students on the dependent variable, perceptions of women's rights in Islam, a multivariate analysis of covariance (MANCOVA) was conducted, controlling for the statistically different variables between groups (see Table 4). The results revealed that Muslim students reported perceiving more gender equity in Islam than non-Muslim students; $F(1, 341) = 29.748$, $p < .001$. After finding differences between Muslim and non-Muslim groups, the remaining analyses were conducted separately by these groups using a dummy-coded categorical variable (0 = non-Muslim, 1 = Muslim).

A simple linear regression found that for both Muslim and non-Muslim respondents, gender significantly predicted self-reported beliefs about women's rights in Islam. For Muslim participants, gender was associated with perceptions of women's rights of Islam ($\beta = -.181$, $p = .025$). Muslim women ($M = 4.72$, $SD = .71$) reported more gender equity in Islam than Muslim men ($M = 4.13$, $SD = .50$). For Muslim individuals, gender predicted a significant portion of variance in these perceptions; $R^2 = .033$, $F(1, 152) = 5.091$, $p = .025$. In contrast, non-Muslim men reported that Islam was more egalitarian between women and men ($M = 3.39$, $SD = .78$) when compared with non-Muslim women ($M = 3.16$, $SD = .71$); $\beta = .130$, $t(242) = 2.038$, $p = .043$. Gender accounted for significant amounts of variance in scores; $R^2 = .017$, $F(1, 242) =$

4.152, $p = .043$. For both Muslim and non-Muslim participants, none of the institutional characteristics of interest predicted perceptions. (see Table 5)

The subsequent analyses explored the role of exposure. Results indicated that increased levels of exposure to Muslim culture through coursework, friendships with Muslim individuals, and/or living in a predominantly Muslim country significantly predicted participants views of women's rights in Islam ($\beta = .203$, $p < .001$) and accounted for significant amounts of variance in scores; $R^2 = .041$, $F(1, 189) = 10.36$, $p < .001$. Tukey's post-hoc comparisons of the three exposure levels revealed that those who reported exposure in all three areas had significantly more positive perceptions of women's rights (M = 3.7, SD = .61) than those who only had one of these exposure experiences (M = 3.11, SD = .74).

Discussion

Results of this study indicate differences between Muslim and non-Muslim college students' perceptions of women's rights in Islam. In general, Muslim college students had higher scores on the 5-point Women's Rights in Islam Scale (WRIS) with a mean score of 4.23 (SD = .47) when compared with non-Muslim college students' average of 3.21 (SD = .73). As predicted, out-group members (non-Muslim students) perceived less gender equity in Islam when compared with in-group members (Muslim students).

This difference may exist for several reasons. First, non-Muslim students' perspectives may be shaped by limited experience and knowledge about Islam and Muslim culture. In contrast, Muslim students in the sample likely have a more nuanced, personalized understanding of and affective commitment to Islam when compared with their non-Muslim peers. Alternatively, as a religious minority within a predominantly Christian US culture, Muslim students may be more invested in portraying their culture and identity as egalitarian.

College students' perceptions of women's rights in Islam also differed by gender. Specifically, Muslim women had higher scores on the WRIS than Muslim men. These findings suggest that Muslim women's perceptions of their experience may differ from how others, including Muslim men, perceive it. In many ways, Muslim women are the group most central to and impacted by research on perceptions of women's rights in Islam. It is significant that of all the sub-groups included in this study, Muslim women perceived Islam as the most egalitarian for both women and men. Notably, Muslim students in the study sample included young women attending four-year institutions of higher education in the United States. By virtue of their enrollment in college, these women already embody many of the educational and social liberties for Islamic women that others may perceive they lack. At the same time, their higher scores may reflect an attempt to counter the more widely-held perceptions of women in Islam as disempowered. For non-Muslim students, the sample of men had higher WRIS scores than non-Muslim women. As a function of gender, non-Muslim women may have a more personal investment in critiquing Islam's treatment of women when compared with their male counterparts. Consequently, they may approach the variant debate on women's rights in Islam more critically than men. However, the largest gap in perceptions was between non-Muslim and Muslim women, with non-Muslim women perceiving the most gender inequity in Islam. Of the four sub-groups, Muslim and non-Muslim women may benefit most from institutional support and guidance when attempting to dialogue about women's rights in Islam. One key form of institutional support found in this study was exposure to Muslim culture.

Despite differences in perceptions between genders and Muslim or non-Muslim religious affiliation, exposure to Muslim culture played a powerful role in non-Muslim students' perceptions. As predicted, for non-Muslim students, higher levels of exposure (travel, academic,

social) to Muslim culture were associated with higher scores on the WRIS. Individuals who reported more exposure had a significantly higher mean score of 3.70 (SD = .61) when compared to non-Muslim participants who did not report exposure (M = 3.21, SD = .73). Although reporting even one exposure variable was associated with more affirmative perceptions, reporting multiple exposure incidents was related to perceiving even more gender egalitarianism in Islam. Considering intergroup contact theory (ICT), more opportunities for cross-cultural contact may help outgroup members lower their own biases. By experiencing and learning more about Muslim culture and Islam, students may develop more nuanced views. Alternatively, US students living in a predominantly Muslim culture or taking a course on Islam may have more investment in or positive beliefs about Islam and its approach to women's rights.

Limitations and Future Directions

While the current study takes a preliminary step towards exploring US college students' perceptions of gender equity in Islam, several limitations affect the generalizability and interpretation of findings. First, initial recruitment was most commonly made through Islamic student organizations or Middle Eastern Studies offices. This tactic may have yielded a sample with a high interest in and engagement with the topic of women's rights and/or Islam. Potentially because of this, this method yielded a majority female sample (70%). Additionally, the sample collected data based on a gender binary that may fail to capture participants' of various gender identities (e.g., gender queer, non-conforming, transsexual, intersex). Second, the majority of the participants came from the Southeastern United States. These limitations may impact the generalizability of our findings. Additionally, the study did not assess details of religious affiliation; future research should parse a part non-Muslim religious affiliation to explore differences across groups. The study also collected categorical rather than continuous data,

which restricted the way we utilized the data and interpreted findings. One of the most significant limitations was the exposure variable and the fact that it was only collected for non-Muslim students. Future research should query all participants and explore the details, quality, and level of exposure more thoroughly. Other limitations of the study include that the data is self-reported and that analyses were correlational and unable to provide causation.

In addition, The Women's Rights in Islam Scale (WRIS) attempts to conceptualize and standardize a topic with widely varying interpretations and opinions. Analysis of religious texts and mandates often varies across individuals and institutions and Muslim culture encompasses a wide heterogeneity in beliefs, backgrounds, and perceptions. Although the measure was developed with the support and input of various experts in Islamic holy text and law, interpreting women's rights in Islam can prove contentious. In order to address this limitation, we took care to interpret results as individually-held perceptions, rather than a wider assessment of religious doctrine or culture.

Future research can identify and explore other factors that influence college students' development and perception-formation. Qualitative data can gather more information by querying about the bases and reasoning for Muslim and non-Muslim women and men's perceptions. In addition, a longitudinal or randomized control trial can isolate the impact of exposure experiences. Nonetheless, this study offers initial insight into the intersectional nature of gender, Muslim versus non-Muslim religious affiliation, and exposure to Muslim associates with college students' perceptions of women's rights in Islam.

Taken together, the results from this study have implications for colleges and universities interested in helping students to shape their perceptions about gender equity in Islam and Muslim culture in general. Through the lens of ICT, these results suggest that those who have more

frequent and diverse encounters with Muslim culture may view Islam's edicts for women's rights as more egalitarian than those who do not have these same experiences. HEIs can promote opportunities for open, balanced dialogue between non-Muslim and Muslim students with a focus on women's rights. In particular, ongoing facilitated discussions and programs that incorporate the key elements of ICT (equal status, shared goals, cooperation, and institutional support) and bring together non-Muslim and Muslim women could provide a vital exposure opportunity. More broadly, HEIs can support effective intergroup contact through several venues such as coursework on women's rights in Islam, study abroad offerings in predominantly Muslim cultures, and intentional multicultural living-learning communities focused on gender equity from a multi-faith perspective.

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Table 1

Characteristics of Sample and Study Variables (N = 397) (% Reporting Unless Otherwise Noted)

Gender	
Female	70.9
Male	29.1
Race/Ethnicity	
Caucasian American	42.1
Middle Eastern	22.8
Asian/ Pacific-Islander American	16.0
African American	9.8
Other	4.5
Hispanic American	1.8
Native American	.8
Age	
20-21	29.3
22-24	28.3
17-19	14.3
25-27	14.3
28	12.5
Other	1.3
Religious Affiliation	
Non-Muslim	60.9
Muslim	39.1
College Classification	
Southeast Public	31.3
Southeast Private	22.8
Northeast Public	13.5
Southwest Public	12.5
Southwest Private	7.5
Midwest Public	4.3
Northeast Private	3.0
Northwest Public	2.0
Midwest Private	1.0
Diversity Index Scores	
Low (.00-.25)	21.4
Mid (.26-.50)	57.3
High (.51-.75)	21.3
Non-Muslim Participants Responses	
Do you have Muslim friends	
Yes	70.4
No	29.6
Have you ever lived in a Muslim country	
No	84.0
Yes	16.0
Have you ever taken a course on Islam	
No	64.6
Yes	35.4

Table 2.

Multivariate Analysis of Variance of Variables for Muslim and non-Muslim Participants

Source	*Df*	*MS*	*F*	*P*
Region	390	1.94	8.79**	.003
Diversity Index	341	3.80	7.58**	.006
Gender	395	4.25	21.53**	.000
Age	395	.396	.246	.620
Race/Ethnicity	395	149.61	80.46**	.000

*p < .05. **p < 0.01.

Table 3.

Correlations of Study Variables (N = 397)

Measure	1	2	3	4	5	6	7
1. Age	-	-0.86	-0.03	0.08	0.17*	-0.01	-0.06
2. Gender		-	0.23*	-0.11*	0.02	-0.09	-0.16**
3. Religious Affiliation			-	-0.41**	0.15**	-0.15**	-0.61**
4. Race/Ethnicity				-	-0.11*	-0.12*	0.26**
5. Region					-	-0.06	-0.12*
6. Diversity Index Score						-	0.11*
7. Women's Rights in Islam Scale							-

*p < .05. **p < .01.

Table 4.

Analysis of Covariance Summary for Muslim and non-Muslim Participants' WRIS Score

Source	*Sum of Squares*	*df*	*F*	*P*
Region	.279	1	.658	.418
Diversity Index	.163	1	.386	.535
Gender	.375	1	.885	.348
Race/Ethnicity	.016	1	.039	.845

*p < .05. **p < 0.01.

Table 5.

Summary of Simple Regression Analyses for Variables Predicting WRIS Scores

	Muslim Students				Non-Muslim Students			
Variable	*B*	*R*	R^2	*F*	*B*	*R*	R^2	*F*
Region	-.078	.078	-.001	.908	-.025	.025	-.004	.145
Diversity Index	-.018	.018	-.009	.036	.058	.058	-.001	.767
Age	-.107	.107	.005	1.77	-.094	.094	.005	2.13
Gender	-.181*	.181	.033	5.09*	.130*	.130	.017	4.15*
Race/Ethnicity	.020	.020	-.006	.060	-.005	.005	-.004	.005
Exposure	-	-	-	-	.203**	.203	.041	10.36**

*p < .05. **p < 0.01.

Appendix A

The Women's Rights in Islam Scale (WRIS) – Background Information

1 School Name

2 Gender

3 Age

4 Marital Status

5 Ethnicity

6 College Major

7 Year in College

8 GPA

9 Religious Affiliation

For non-Muslim participants

1 Do you have Muslim friends?

2 Have you ever lived in a Muslim country?

3 Have you had any courses about Islam?

4 What are your sources of Islamic knowledge?

5 Nationality

6 How long have you lived in the United States?

7 What country were you born in?

8 What country did your mother come from?

9 What country did your father come from?

1 In Islam, women as well as men are encouraged and rewarded for pursuing education.

2 Girls in Islam are required to study a different curriculum than boys.*

3 Islam considers men as more capable of logical thinking than women.*

4 Higher education completion of a woman in Islam depends on her husband's success.*

5 In Islam, a woman may earn a higher education degree than that of her husband if she desires.

6 According to Islam, women should be given the same opportunities to pursue knowledge as men.

7 Only religious knowledge is beneficial for a woman from an Islamic perspective.*

8 According to Islam, being educated is a right and responsibility, therefore, Muslim men are expected to pursue an education.

9 According to Islam, being educated is a right and responsibility, therefore, Muslim women are expected to pursue an education.

10 From an Islamic perspective, pursuing knowledge is a struggle against ignorance which is mandated (jihad) upon all human beings (including women).

11 In Islam, a woman has a right to choose whether she wants to get married.

12 It befalls upon parents to plan a Muslim woman's career according to her abilities and aspirations.*

13 In Islam, women are permitted to live independently and manage on their own.

14 In Islam, it is not permitted to force a woman into a marriage that she does not agree to.

15 It is more important for a woman in Islam, to satisfy her spouse's wishes, than for a man to satisfy his wife's wishes.*

16 In Islam, some household chores are only performed by women.*

17 In Islam, a woman is not responsible for any household chores unless she chooses to perform them.

18 In Islam, for reasons of modesty and family honor, a woman is not permitted to go out to work.*

19 A young girl, in Islam, cannot plan her future because her plans depend on her future husband's plans.*

20 Forcing a Muslim woman to marry without her consent is a violation of Islamic law.

21 In Islam, Mahr (dowry) is given by the man to the woman as a sign of respect.

22 In Islam, women have a right to seek divorce.

23 In Islam, even for women who wish to be scientists or medical doctors, marriage, and family remain as her priorities.*

24 When a baby is born, the woman in Islam rather than the man must quit her job (if necessary) to take care of the baby.*

25 In Islam, when men and women work the same job, it is expected that men will be paid more than women.*

26 Any money a Muslim woman earns belongs to her and she has the choice whether to contribute to the household incomes or not.

27 Professional satisfaction of a woman in Islam depends on her husband's success.*

28 In Islam, women are not encouraged to compete for positions of power and public influence.*

29 In Islam, it is not permitted for a wife to hold a higher position than that of her husband.*

30 In Islam, a woman has the right to develop any professional career.

31 In Islam, women are given exactly the same job opportunities as men.

32 It is possible for a Muslim woman to supervise men.

33 A Muslim woman has the right to a professional career even when it involves some compromise on the part of her family.

34 In Islam, some jobs and vocations that are allowed for men may simply not be allowed for women.*

35 Men and women, in Islam, are given equal opportunities to professional career development.

36 In Islam, it is permitted for a Muslim woman to earn more than her husband.

37 In Islam, it is the responsibility of the husband to pay for his wife's living expenses regardless of the woman's income.

38 A Muslim woman may voluntarily work outside of her home for family support but cannot be forced to do so.

39 In Islam, what a woman inherits becomes hers, and neither her husband nor any male relatives have a right to it.

reverse-scored items are flagged*

The Culture of Mentoring: Ethnic Identity for Minority Mentees Paired with Majority and Minority Group Mentors

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Abstract

Mentoring programs aim to promote beneficial outcomes for their ethnically and racially diverse participants. The current study examines the associations between: 1) mentors' and mentees' ethnic identities and 2) mentors' ethnocultural empathy and mentees' ethnic identities. Participants included 95 mentoring pairs consisting of middle school girls of color and college student women from both majority and minority group cultural backgrounds. A series of linear regressions revealed that mentors' ethnocultural empathy and EI exploration and commitment were associated with minority group mentees' ethnic identity exploration. Some of the implications for mentor training are discussed.

The Culture of Mentoring: Ethnic Identity for Minority Mentees Paired with Majority and Minority Group Mentors

Research has promoted mentoring as an increasingly popular venue for positive youth development. Membership in mentoring relationships has been linked to minority youths' improved academic performance, self-esteem, and ethnic identity formation (Yancey, Grant, Witt, Kravitz-Wirtz, & Mistry, 2011; Dubois & Karcher, 2013). However, mentoring experts have underscored a need for more research examining the role ethnic identity may play in mentoring (Spencer & Rhodes, 2005). Importantly, a recent meta-analysis by Rivas-Drake and colleagues (2014) highlighted 46 studies that established an association between ethnic identity (EI) and positive psychosocial, academic, and health outcomes for youth of color. Ethnic identity formation may have particular significance because of EI's association with well-being and buffering the negative effects of discrimination (Greene, Way, & Pahl, 2006; Williams, Aiyer, Durkee & Tolan, 2014). Although the buffering effects of ethnic identity and youth mentoring have been established separately, less is known about youth mentoring as a possible vehicle for mentors' and mentees' ethnic identity development in a relational setting. Both mentors' and mentees' ethnic identities may be associated with their ability to form a mutual, trusting, and empathic relationship with one another. Given that the most well-known theory of the influence of mentoring on positive youth outcomes posits that the establishment of mutuality, trust, and empathy within the mentoring relationship shapes mentees' social-emotional, cognitive, and identity development, which in turn, influences outcomes (Rhodes, 2002), an understanding of ethnic identity development in mentoring relationships is warranted.

Many formal programs in the United States have high proportions of cross-cultural matches that pair majority group mentors with minority group mentees, (Rhodes and DuBois,

2006; Rhodes, Reddy, Grossman, & Lee, 2002). Research on same versus cross-cultural matching has yielded mixed results (Liang & Rhodes, 2007; Sanchez, Colon-Torres, Feuer, Roundfield, & Berandi, 2013). Proponents of cultural matching state that it positively impacts relationship closeness and efficacy (Rhodes, et al., 2006). These proponents note that mentors of color may respond better to the complex psycho-social conflicts minority youths encounter and better encourage mentees' ethnic identity development (Rhodes, et al., 2006; Rhodes, 2002). In contrast, Rhodes and colleagues found no difference in mentors' efficacy, program outcomes, or duration of the relationship between culturally matched and non-matched pairs (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). The present study aims to extend this inquiry by investigating the association between: 1) the ethnic identities of majority and minority group mentors and the ethnic identities of their minority group mentees and 2) the ethnocultural empathy of both majority and minority group mentors and the ethnic identities of their minority group mentees.

Ethnic identity formation has been conceptualized as a major developmental task or "one aspect of acculturation by which the concern is with individual's personal relation to his or her own group as a subgroup of the larger society" (Phinney, 1989, p. 500). Phinney theorizes that all people have the option to explore and resolve issues related to their ethnicity, but individuals vary in the extent to which they engage in this process (Phinney, 1992). While the study of identity exploration during adolescence is long standing, recent research suggests that processes of ethnic identity development may extend well into emerging adulthood (Syed, Azmitia & Phinney, 2007). The present study contributes to this body of research by including a sample of both early adolescents (middle school girls who are mentees) and late adolescents (college

women who are mentors). With this sample, we investigate a relational process of ethnic identity formation at two distinct developmental stages.

Mentoring Relationships and Ethnic Identity

Despite the established association between ethnic identity and minority youth outcomes, few studies have investigated its role in program-based mentoring with cross-cultural relationship. Although the context of cross-cultural relationships is vastly different, research on cross-racial adoptions and ethnic identity help inform our predictions for the current study. Hollingsworth's (1997) meta-analysis found that African-American and Mexican-American children who were adopted by individuals from different races or ethnic groups had lower racial and ethnic identity than those adopted by individuals from their same race. However, a mentoring relationship is almost always less encompassing than adoption. With mentoring research, recent studies have found that cultural mistrust may hinder rapport-building when minority youth are paired with majority group mentors, especially in the early stages of the mentoring relationship (Darling, Bogar, Cavell, Murphy & Sanchez, 2006; Ogbu, 1990a). However, it may also be that the responsiveness of the mentor is more important than cultural similarity. Rhodes (2002) conceptualizes the processes of mutuality, trust and empathy as key components to establishing an effective mentoring relationship. Further research is needed.

Ethnocultural Empathy and Ethnic Identity

Ethnocultural empathy (ECE), or empathy toward individuals who are culturally different, has been found to be important in effective counseling (Wang, et al., 2003). Preliminary evidence suggests that this may be true for cross-cultural youth mentoring as well (Leyton-Armakan, Lawrence, Deutsch, Williams & Henneberger, 2012). A study of the relationship between mentor ECE and mentee satisfaction found that mentees reported enhanced

satisfaction when their mentors had greater ECE (Leyton-Armakan et al., 2012). It may also be that mentors' ethnocultural empathy is associated with mentee's ethnic identity formation for minority youth, given that ethnic identity has significant salience and value for these youth during adolescence (Williams, Aiyer, Durkee, & Tolan, 2013).

Current Study and Research Questions

This study examines the relationships between mentors and minority group mentees' ethnic identities, exploring associations based on the majority/minority status and mentors' ethnocultural empathy. Specifically: 1) Are mentors' individual cultural groups (of color or White) associated with minority group mentees' levels of ethnic identity? and 2) Are mentors' ethnic identities and levels of ethnocultural empathy associated with minority group mentees' individual ethnic identities? We hypothesize that minority group mentees paired with minority group mentors will have higher levels of ethnic identity and that mentors' ethnocultural empathy and ethnic identity will be positively associated with mentees' ethnic identities.

Methodology

Participants

Subjects in this study participated in the Young Women Leaders Program (YWLP), a combined group and one-on-one mentoring program that pairs college women with middle school girls for a school year. YWLP aims to enhance the self-esteem and leadership skills of both age cohorts (Lawrence, Sovik-Johnston, Roberts, & Thorndike, 2009). Potential mentors are recruited from a large, public university and mentees are recruited from four public middle schools. The middle schools' staff nominated girls whom they identified as "at-risk" for negative social, emotional, and/or academic outcomes. After obtaining parental consent and mentee assent during the initial in-person interviews, mentors were assigned to a middle school girl by a

matching specialist. Matches were made based on factors such as mentors' scheduling availability and mentor and mentees' responses from a brief interest inventory. In few cases, assignments considered special requests made by participants' parents (e.g., a mentor who could tutor math). Participant data were drawn from a larger sample evaluating the program in 2008 and 2009. Two percent of college women mentors in this study reported being in their first year of college, 40% in their second year, 33% in their third, 22 % in their fourth, and 3% graduate students or other academic year affiliations; they ranged in age from 18-25. Mentees ranged in age from 11-13 years old. Two-thirds of the youth qualified for free or reduced-price lunch (67%).

The study examines ethnic identity by majority/minority ethnic group status, rather than by separated racial/ethnic categories. A meta-analysis by Smith and Silva (2011) examined associations between ethnic identity and self-esteem. They reported no differences between the included racial/ethnic groups (Smith & Silva, 2011). This suggests similarities in the process of ethnic identity formation across groups, despite the individual, nuanced contexts of each subgroup. Phinney made a similar assumption, having developed the Multigroup Ethnic Identity Measure (MEIM) to measure ethnic identity across a diverse sample of respondents (Phinney, 1992). Consequently, the study will examine ethnic identity by majority/minority ethnic group status, rather than by separated racial/ethnic categories. For the purposes of this study, participants were identified as majority group members (White) or minority group members (Black, Asian/Pacific Islander, Latino/Hispanic, or Other). More detailed racial/ethnic characteristics of the sample and the pairs can be found in Table 1.

Mentors and mentees completed self-report surveys in the fall before the mentoring program began, and at the completion of the program in the spring during the 2008-2009

academic school year. The present study used post-program dyadic data; dyads were included in the analyses if both the mentor and mentee completed the protocol. The final dyadic sample included 95 mentoring pairs.

Measures

Ethnic Identity. Both mentor and mentee's ethnic identities were assessed using Phinney's (1992) *Multigroup Ethnic Identity Measure (MEIM).* The psychometric development of the MEIM has resulted in the emergence of two dimensions: 1) commitment, or one's sense of belonging to a group, and 2) exploration, or the mental processes related to understanding the meaning of group membership (Phinney, 1990). The Commitment subscale (EI Commitment) assesses one's affirmation, belonging, and commitment to her ethnic group (e.g., "I have a clear sense of my ethnic background and what it means to me"), and the Exploration subscale (EI Exploration) includes items that assess the mental processes related to understanding the meaning of group membership (e.g., "I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs"). (Syed, et al., 2012). For this sample, internal consistency was good for both the Commitment (α = .81) and Exploration subscale (α = .89).

Ethnocultural Empathy. The 15-item *Empathic Feeling and Expression* sub-scale of the *Scale of Ethnocultural Empathy (SEE)* (Wang et al., 2003) uses a 6-point Likert scale (Strongly Disagree" to "Strongly Agree") to assess internal feelings about cultural issues (e.g., "I share the anger of those who face injustice because of their racial and ethnic backgrounds"), and expression of cultural empathy (e.g., "I express my concern about discrimination to people from other racial and ethnic groups"). This subscale has good internal consistency (α =. 91) and is the strongest predictor of overall ethnocultural empathy among the four factors of the scale (Wang, et al., 2003). Descriptives for the SEE scale can be found in Table 2.

Results

Mentee ethnic identity exploration was the outcome in the first regression model. Predictors included mentors' EI commitment in step one, dichotomous match status (minority mentee paired with majority (0) or minority (1) mentor) in step two, and the interaction between mentors' EI commitment and match status in the third and final step. There was a main effect for mentors' EI commitment (β = .224, p = .04) in association with mentees' EI exploration in the first step (Table 3). The addition of variables in the second and third steps did not add to the explanatory power of the model. The final adjusted R^2 of .08 suggested that 8% of the variance in mentees' ethnic identity exploration was explained by these variables, (ΔR^2: .046, $F(2, 82) = 3.89$, $p = .05$).

In the second model predicting mentees' EI exploration, mentors' EI exploration was entered in step one, dichotomous match status in step two, and the interaction between mentors' EI exploration and match status in the third and final step. In step one, mentors' EI exploration had a significant main effect (β = .224, p = .04). In the second step, with the inclusion of match status, mentors' EI exploration (β = .31, p = .02) remained significant and the adjusted R^2 of .04 suggested that 4% of the variance in mentees' EI exploration was explained by these variables. The final step was not significant (Table 3).

To determine if mentors' ethnocultural empathy (ECE) was related to minority group mentees' ethnic identity, we ran two hierarchical linear regressions with mentees' ethnic identity exploration and commitment as predictors in the two models. These were run with mentor's ECE in the first step, match status in the second, and the interaction between match status and ECE in the final step. For the model predicting mentees' EI *exploration*, the first two steps of the model were significant, but the third was not (p = .067). In step one, mentors' ECE had a significant

main effect (β = .279, p = .01). In the second step, with the inclusion of match status, mentors' ECE (β = .298, p = .009) remained significant. In the final step, no variables remained significant. The final adjusted R^2 of .08 suggested that 8% of the variance in mentees' ethnic identity exploration was explained by the included variables.

Discussion

Research on ethnic identity and mentoring has focused on the individual, rather than the relational, identity formation process that can occur in mentoring relationships. Studies examining ethnic identity development within relationships underscore the impact of connections between people from the same racial/ethnic background (Bernal & Knight, 1993). In contrast, our study found that mentors' ethnic identity and ethnocultural empathy predicted the ethnic identity exploration of their minority mentees, regardless of whether they were paired with a White mentor or a mentor of color. There were no significant interactions between ethnic identity and match status, suggesting that the two variables operated independently from one another (i.e., ethnic identity scores did not depend on being in a majority-minority or minority-minority mentoring pair).

While we hypothesized that minority mentees paired with minority mentors would have higher ethnic identities, we found that mentors' ethnic identity exploration and commitment predicted higher levels of minority mentees' ethnic identity exploration (i.e., mentees' willingness to explore and learn about their own cultural group) regardless of mentors' ethnicity. There are several possible explanations for this. It may be that having an ongoing relationship with someone who has a solidified cultural identity and/or willingness to self-reflect and explore her cultural identity may activate mentees to think about their own culture, ethnicity, and race.

Regardless of the cultural backgrounds of the mentors, their willingness to engage with questions of culture internally may help their mentees feel safe examining their own ethnic identities.

Results from this study have implications for mentoring programs interested in promoting ethnic identity development among mentoring pairs. The mentoring program from which study participants were recruited, the Young Women Leaders Program (YWLP), focuses on the participants' appreciation for cultural differences (Lawrence et al., 2009).). In addition, to foster cultural competence regarding issues facing adolescent girls, several of YWLP's group sessions engage mentoring pairs in exploration of and reflection on their own and each other's racial and ethnic identities (Lawrence et.al., 2009). These training and group activities may provide a foundation for both majority-minority and minority-minority pairs' to discuss cultural topics and their own EI exploration and commitment.

YWLP uses intergroup contact theory (ICT; Allport, 1954) as the organizing framework to enhance participants' cultural competence and reduce prejudice (Lee, Germain, Lawrence, Marshall, 2010). ICT postulates that individuals from different cultural groups connect best when four conditions are met: equal status, common goals, intergroup cooperation, and support from authority. These conditions are also similar to conditions research on mentoring has identified as related to positive outcomes. These include a collaborative, bidirectional versus hierarchical mentoring relationship, (Schmidt, Marks, & Derrico, 2007; ICT's equal status) engaging in shared activities that unite mentors and mentees around mutually agreed-upon tasks (Larson, 2006; ICT's common goals and cooperation), and on-going mentor support, training, and feedback from mentoring program leaders to enhance the mentoring relationship (Dubois & Karcher, 2013; ICT's support from authority).

Another notable finding from the study is the association between mentors' ethnocultural empathy and minority group mentees' ethnic identity exploration. Keller and Pryce (2010) found that mentoring characterized by responsiveness and empathy facilitates identity development for participants. The present study expands the focus to ethnocultural empathy, that is, mentors' empathetic responsiveness to other's identity and concerns. Awareness of the issues facing adolescent girls of color may enable the mentors in YWLP to provide a relational context of empathic support for mentees of color to explore their identity. Conversely, minority group mentees' ethnic identity exploration may influence mentors' ability to be ethnoculturally empathetic.

Although the study contributes to understanding the association between cultural match, ethnic identity, and ethnocultural empathy in mentoring, there are several considerations that frame our findings. Only a small subset of college women and adolescent girls are enrolled in YWLP and the relatively small sample size limits the generalizability across populations and settings. The study also relies on self-report data that can be complicated by many factors, including social desirability, particularly around topics related to race and ethnicity (Sodowsky, Kuo-Jackson, Richardson & Corey, 1998). When studying adolescents, this is a particular limitation because their moods tend to be more variable and this may skew their responses (Darling, 2005). The regression models also did not account for covariates (e.g., socio-economic status). Finally, the study only provides a cross-sectional view of the mentoring relationship and does not allow for causal inferences about associations. Further research can examine these constructs longitudinally and include qualitative exploration of the centrality and salience of EI.

Despite the limitations noted, results from the present study can inform mentoring programs interested in ethnic identity development for participants. Our findings suggest that

mentoring relationships can play a role in cultural identity formation for pairs from similar *and* different cultural backgrounds.

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Table 1.

Racial/Ethnic Breakdown of Pairs by Mentor Race/Ethnicity (*Percentage and Frequencies)*

Mentee R/E	White	Black	Multi-Ethnic	Asian/PI	Latina/Hi	Other
White	36.1 (22)	3.7 (1)	0.0 (0)	0.0 (0)	20.0 (1)	0.0 (0)
Black	13.1 (8)	44.4 (12)	42.9 (3)	66.7 (4)	20.0 (1)	75.0 (3)
Multi-Ethnic	11.5 (7)	7.4 (2)	14.3 (1)	16.7 (1)	20.0 (1)	0.0 (0)
Asian/PI	1.6 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Latina/Hi	14.8 (9)	3.7 (1)	0.0 (0.)	16.7 (1)	40.0 (2)	0.0 (0)
Other	14.8 (9)	7.4 (2)	14.3 (1)	0.0 (0)	0.0 (0)	25 (1)
Missing	8.2 (5)	22.2 (6)	28.6 (2)	0.0 (0)	0.0 (0)	0.0 (0)

Table 2

Means for Multigroup Ethnic Identity Measure (MEIM) and Scale of Ethnocultural Empathy (SEE) (Wang, et al., 2003)

Group	MEIM-Exploration	MEIM-Commitment	SEE
All Mentors	2.61	2.96	4.58
All Mentees	2.33	3.04	n/a
Minority Group Mentors	3.01	3.30	4.82
Minority Group Mentees	2.64	2.99	n/a
Majority Group Mentors	2.42	2.80	4.46
Majority Group Mentees	2.54	2.87	n/a

Table 3

Summary of Hierarchical Linear Regression Analyses Predicting Mentees' Ethnic Identity Exploration and Commitment (N = 95)

Mentors' Predictor Variables	*B*	*R*	R^2	ΔR^2	*F*	ΔF
Model 1 (Mentee EI Comm.)						
Step 1: EI Comm.	.014	.014	-.012	.000	.017	.017
Step 2: EI Comm.	.019	.017	-.025	.000	.011	.006
Match Status	-.010					
Step 3: EI Comm.	-.004	.027	-.037	.000	.019	.036
Match Status	-.010					
EI Comm. x match status	.032					
Model 2 (Mentee EI Exp.)						
Step 1: EI Comm.	.214*	.214	.034	.046	3.88*	3.89*
Step 2: EI Comm.	.266*	.239	.034	.011	2.43	.973
Match Status	-.119					
Step 3: EI Comm.	.122	.274	.040	.018	2.14	1.53
Match Status	-.121					
EI Comm. x match status	.198					
Model 3 (Mentee EI Exp.)						
Step 1: EI Exp.	.224*	.224	.038	.050	4.21*	4.21*
Step 2: EI Exp.	.313*	.268	.048	.022	3.06*	1.86
Match Status	-.173					
Step 3: EI Exp.	.234	.275	.040	.004	2.12	.303
Match Status	-.163					

Mentors' Predictor Variables	*B*	*R*	R^2	ΔR^2	*F*	ΔF
EI Exp. x match status	.095					
Model 4 (Mentee EI Comm.)						
Step 1: EI Exp.	.039	.039	-.011	.002	.123	.123
Step 2: EI Exp.	.054	.046	-.023	.001	.083	.044
Match Status	-.028					
Step 3: EI Exp.	.119	.068	-.034	.002	.119	.193
Match Status	-.036					
EI Exp. x match status	-.079					
Model 5 (Mentee EI Comm.)						
Step 1: ECE	.202	.202	.029	.041	3.54	3.54
Step 2: ECE	.207	.203	.018	.000	1.76	.016
Match Status	-.014					
Step 3: ECE	.104	.223	.014	.009	1.41	.727
Match Status	-.017					
ECE x match status	.139					
Model 6 (Mentee EI Exp.)						
Step 1: ECE	.279*	.279	.067	.078	7.02*	7.02*
Step 2: ECE	.298*	.285	.059	.003	3.64*	.310
Match Status	-.062					
Step 3: ECE	.243	.290	.050	.002	2.47	.219
Match Status	-.063					
ECE x match status	.075					

*$p < .05$. **$p < .01$.

Individual Characteristics and Institutional Opportunities Associated with College Students' Global Competence Development

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Abstract

Traditionally, study abroad has been lauded as the main pathway to college students' global competence development, but only a minority of students can participate in these experiences. To examine alternative routes to developing global competence during college, this study used hierarchical linear modelling to explore the association between 95 college student women's foreign language fluency, individual characteristics, and globally-related academic and social experiences (travel and non-travel based) and the outcome of interest: global competence. Findings underscored the association of students' foreign language fluency and their collective self-esteem with self-reported global competence. The results also highlighted the link between global competence and students' globally-related travel, academic, and social experiences. In particular, the impact of friendships with people from different countries was linked with overall college students' global competence after controlling for all other variables of interest. The implications for higher education institutions and their social programs are discussed.

Individual Characteristics and Institutional Opportunities Associated with College Students' Global Competence Development

A convergence of economic, political and societal factors has led universities to promote students' cultural acuity more than ever before (Altbach & Knight, 2006). In an increasingly globalized world, higher education institutions (HEIs) have focused specifically on developing students' global competence (Krajewski, 2011; Jones & de Wit, 2012; Coryell, Durodye, Wright, Pate, & Nguyen, 2010). The international economy and job market demands flexible, self-aware citizens who are able to skillfully traverse cultural boundaries (Altbach & Knight, 2006). Beyond this pragmatic goal, cultural competence has been linked with positive psycho-social outcomes. These include more successful interactions in novel situations (Wilson, Ward, & Fischer, 2013), increased sensitivity to cross-cultural differences, heightened adaptability (Hansen, Pepitone-Arreola-Rockwell, & Greene, 2000), and enhanced creativity (Leung, Galinsky, & Chiu 2008).

Additionally, global cultural competence has been connected with desirable cognitive and learning outcomes for college students. Chao, Okazaki, and Hong (2011) noted that more culturally-competent individuals excel at integrating seemingly disparate pieces of information into a meaningful whole. They posited that these individuals may have more reflective awareness of their own thoughts and behaviors (Chao, Okazaki, & Hong, 2011). Additionally, the acquisition of knowledge in new cultural systems requires complex mental processes that can lead to stronger critical reasoning and abstract thinking (Chiu & Hong, 2005). Related, research on cultural metacognition suggests that the dynamic experience of intergroup contact—engaging with people of a different culture than one's own—may help students develop skills to apply broad knowledge discriminately and accurately in different socio-cultural settings (Leung, Lee, & Chiu, 2013).

Global Competence in Higher Education

Over the past 40 years, researchers have explored the conceptualization and measurement of intercultural competence (Hammer, Gudykunst, & Wiseman, 1978; Hammer, Bennett, & Wiseman, 2003; Ruben, 1989; Hunter, 2004). Given the multifaceted factors that can lead to effective multicultural beliefs, knowledge, and interactions, research on global cultural competence has led to multiple conceptualizations of the construct (Wilson, Ward, & Fischer, 2013). In the early years of global competence research, Wiseman's (1978) seminal work identified 24 abilities (e.g., the ability to deal with unfamiliar situations) that fit into interpersonal relationship-building, effective communication, or psychological stress-management domains. Focusing more on communication and exchange, Deardorff (2006) describes intercultural competence as "the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes." (pp. 247-248). Integrating aspects of both approaches, Chen & Starosta (2000) grouped intercultural competence into three affective and applied components that include: 1) sensitivity: the ability to notice, appreciate, and understand cultural differences, 2) awareness: understanding the impact of culture on interactions, and 3) skills: applied abilities that facilitate effective intercultural interactions.

Looking more at the intellectual process of global competence development, Hunter, White, and Godbey (2006) conceptualized global competence as a cognitive process that allows for effective cross-cultural encounters including the necessity of "having an open mind while actively seeking to understand cultural norms and expectations of others, and leveraging this gained knowledge to interact, communicate, and work effectively outside one's environment." Their definition underscores both the internal (personal traits and attitudes that help one effectively interact across cultural boundaries) and external readiness (knowledge and skills

gained through education and life experience) that precipitates globally-competent contact. Others have focused even more on personality traits and disposition. Chiu, Lonner, Matsumoto, & Ward (2013) investigated the set of individual characteristics and traits within a person that when manifested, ease intercultural relationships, while Matsumoto & Hwang (2013) examined knowledge and applied skills that demonstrate competence. Despite the range of definitions, each one focuses on person-centered variables that assist individuals as they attempt to connect across cultural differences.

For this study, the term global competence refers to students' awareness of, knowledge about, and skills needed to interact effectively with individuals from a different country than one's self-identified home country (Sue & Torino, 2005). HEIs across the United States (US) have identified global competence as a priority for students in the modern, globalized economy (Jones & de Wit, 2012; Coryell, Durodoye, Wright, Pate, & Nguyen, 2010; Brustein, 2003). College students, typically between the ages of 18 and 25, attend HEIs during a developmental stage labeled "emerging adulthood" (Arnette, 2014). During this period of identity exploration and growth, students often encounter more diversity than ever before both in and outside the classroom (Arnett, 2000; Gurin, Dey, Hurtado, & Gurin, 2002).This opens up possibilities for colleges to intentionally help students explore their identity as global citizens in multifaceted ways.

Despite its benefits, targeting global competence development during college can require a significant investment of time, energy, and resources for both individual students and their institutions (Bellamy & Weinberg, 2006). Moreover, a lack of consensus on the best way to conceptualize, much less build, global competence among young adults makes it difficult to identify "best practices" for higher education (Chiu, et al., 2013; Kuada, 2004; Kealey, 2003;

Lusting & Koester, 2003). HEIs' study abroad opportunities are perhaps the most recognized venue for students to gain cross-cultural experience. Consequently, research has focused on study abroad as the primary vehicle for developing students' international competence (Williams, 2005; Deardorff, 2006).

Yet, various factors including race, socio-economic status, and academic and career expectations have been found to impact students' decisions about studying abroad (Stroud, 2010). This is particularly true for people of color and first generation college students (Shaftel, Shaftel, & Ahluwalia, 2007). For example, although Black students make up 16% of US post-secondary enrollment, they comprise only 5% of students who study abroad (NAFSA, 2013). Moreover, Open Doors (2014) reports that 289,408, or 9% of all undergraduate students in the US, participated in study abroad programs during the 2012-2013 academic year. Also, many students hesitate to leave campus because some institutional policies make credit transfer difficult, resulting in a negative impact on students' trajectory towards graduation (Shaftel, Shaftel, & Ahluwalia, 2007).

Given that about 63% of people surveyed by the National Association of Foreign Student Advisors responded that "students need to gain skills necessary to compete in the global marketplace" (NAFSA, 2012), it is vital to explore additional pathways to college students' global competence development. As colleges become more diverse and integrate students from around the world (Pohl, 2015), the question arises: Why not capitalize on the international diversity already present on campuses? The internationalization of college campuses allows students to develop global awareness and skills across their college tenure, rather than in isolated, often brief, study abroad experiences.

For all students, navigating global competence can be challenging without sufficient preparation (Bellamy & Weinberg, 2006). To provide this preparation, Knight and de Wit (1995) suggest embedding intercultural topics throughout the teaching, research, and service missions of HEIs. Jones and Killick (2013) also support this assertion. They propose that HEIs systematically weave global learning across curricula to build students' cultural awareness and skills. Most HEIs offer various venues for global cultural experiences both in academic domains (e.g., coursework on global issues) as well as in social domains (e.g., residence halls, student life). Less is known about the association between these activities and students' global competence than the links between travel-based experiences and the development of global competence.

Potential Variables Associated with College Students' Global Competence

In conceptualizing what factors might contribute to students' global competence development during college, we were informed by Astin's (1993b) Input-Environment-Outcomes (I-E-O) model, a template developed to guide research on outcomes of interest in HEIs. The model posits that student outcomes are influenced by characteristics that students have before attending college as well as what they do in college. The Input-Environment-Outcomes (I-E-O) model has been applied to understand a range of student outcomes including: satisfaction and retention for minority students (Strayhorn, 2012), the impact of study abroad programs (Zhai & Scheer, 2002), and perceptions of cultural competence development (Thompson, 2008). When applied to college students' global competence development it highlights the importance of considering how college students' individual characteristics and curricular and extracurricular opportunities developed prior to and during college might be associated with their global competence development.

The I-E-O model highlights inputs (i.e., individual characteristics and experiences that students bring to college from their home community), environment (i.e., the combination of academic and extracurricular experiences that impact students during college), and outputs (i.e., the characteristics, behaviors, and skills that students develop while in college; Astin, 1993b). Student outputs include "aspects of the student's development that the college either does influence or attempts to influence," including outcomes such as "student's achievement, knowledge, skills, values, attitudes, aspirations, interests and daily activities." (Astin, 1970 p. 4) Inputs include attributes the student comes to college with and can be fixed traits (e.g., race) or traits which students bring to their HEI. The college environment includes aspects of the educational institution that may impact students such as curriculum, policies, and peer relationships (Astin, 1993).

Astin's theory of student involvement also explores how HEIs can develop desirable outcomes for their institutions through co-curricular engagement and peer relationships (Astin, 1984). In fact, Astin has argued that social relationships and friendships are the most impactful environmental factor of the HEI experience (Astin, 1993b). To examine the potential influence of a peer-centered environment on college students' global competence development, the study utilized participants from a service-learning course focused on youth mentoring that also had a global focus. The Young Women Leaders Program (YWLP) uses intergroup contact theory (ICT; Allport, 1954) as an organizing framework to enhance YWLP participants' social involvement in cross-cultural relationships with fellow college student mentors and middle school mentees (Lee, Germain, Lawrence, Marshall, 2010). ICT posits that individuals from different cultural groups connect best when four conditions are met: equal status, common goals, intergroup cooperation, and support from authority. To establish these conditions, YWLP

emphasizes collaboration and cooperation, shared activities that bond participants around mutually agreed-upon tasks, and on-going support and feedback from program leaders (Lee, Germain, Lawrence, & Marshall, 2010). Using the I-E-O model and ICT theory, the YWLP provides a service-learning academic, social, and co-curricular context in which to examine how the HEI environment might foster the institutional output of interest: the development of globally-competent students.

To assess the impact of the HEI environment, and avoid making spurious assumptions based on confounding variables; Astin recommends the use of multi-institution longitudinal studies. At the same time, he recognizes that this is not always plausible, and suggests another analytic method for higher education research: linear multiple regression modeling. Using this framework, the input, covariates, and environment variables of interest are entered hierarchically in blocks (Astin, 1970).

Variables of Interest

Foreign Language Fluency. College students' foreign language fluency has been identified in research on college student development as a component of students' intercultural or global competence. For example, college students' foreign language skills have been found to play a role in the development of students' overall cross-cultural empathy (Ward & Ward, 2003) and efficacy in intercultural interactions (Jensen, 1995). Students' foreign language fluency can also lead to a more nuanced cultural awareness in international encounters (Watson, 2014). However, a student's foreign language fluency can be achieved in a variety of ways, and, thus, may be categorized as both inputs and environment in Astin's model. For example, many students acquire foreign language skills during college through taking classes or majoring in a foreign language (environment). For many other students, however, they may have developed a

proficiency in the language prior to college because they took foreign language classes during middle and high school, or it was the primary language spoken at home (inputs). Given that research has established the influence of foreign language fluency on the development of college students' global competence development, this study will include the variable and consider it both an input and environment variable

Individual Characteristics. Wilson and colleagues (2013) explored students' preexisting individual characteristics, or inputs, associated with college students' cultural competence. They suggest that certain individual characteristics can serve as antecedents to students' global competence development (Wilson, et al., 2013). Responsible citizenship and collective self-esteem may be two such characteristics.

Musil (2006) referred to responsible citizenship as the constellation of critical thinking, applied skills, and civic attitudes that enable individuals to participate actively and conscientiously within their society (e.g., voting in elections, making consumer decisions based on companies' ethics). While students may come to college with these traits, HEIs can also encourage and foster the development of these characteristics. In fact, Colby (2003) noted the importance of campus environments intentionally challenging students to develop as responsible citizens. As students widen their perspectives to be more civic-minded and engaged, he suggested that they may develop the skills to think more complexly about their role within the wider world (Colby, 2003).

The college student development literature has also identified the importance of students' collective self-esteem or "the feelings of self-worth one derives from one's group memberships" (Deardorff, 2006; Garcia & Sanchez, 2011, p. 1) to their general development. Hunter (2004) suggests that self-knowledge and comfort with one's own socio-cultural group shapes how

individuals connect within new cultural contexts. Thus, college students' perceptions of themselves as responsible citizens and their level of collective self-esteem may influence their global competence development during college and will be treated as covariates in the study.

Globally-Related Academic and Social Experiences. Globally-related academic and social experiences during college would be considered a part of the "environment" in the I-E-O model. Not surprisingly, cross-cultural travel experiences for students during college have received the most attention in the literature and there is substantial research indicating its association with the development of college students' global competence (Stebleton, Soria, & Cherney, 2013). In a study of college students engaged in study abroad experiences, Cushner (2007) found that overseas experiences led to the development of cognitive, affective, and behavioral processes related to cultural competency. Carlson and Wideman (1988) suggested that study abroad increased international interest and concern among the participating students. A longitudinal, retrospective research project of over 6,000 students explored study abroad experiences from 1960 to 2007. The findings delineated the lasting impact study abroad had on students' global competence (Paige, Frye, Stallman, Josic, & Jon, 2009). They found that students exposed to other cultures in this way were more likely to become globally-engaged citizens in their lifetime when compared to participants who had not had study abroad experiences. Furthermore, more time abroad was associated with more global engagement, suggesting that the length of travel experience may have a lasting effect on cultural competence.

Non-travel-based globally-related academic experiences may also impact students' global competence development (Jones & Killick, 2013; Mehta, Brannon, Zappe, Colledge, & Zhao, 2010). Knight and de Wit (1995) recommended that institutions embed international topics across HEIs academic curricula and mission statements. Rather than focus on international topics

or study abroad alone, Hunter (2004) highlighted the need for course offerings focused specifically on global competence and its development. Jones and Killick (2013) suggest that in addition to study abroad experiences, HEIs should integrate global themes into required coursework to achieve the outcome of global competence for their students. Their research also recommends that HEIs focus on the tangible academic and social outcomes for students. To do this, they encourage systematic, administrative-level support for course offerings on globally-related topics, well-developed study abroad opportunities, and social exposure to international topics (Jones & Killick, 2013). Kitsantas and Meyer (2001) found that the educational goals students set for themselves prior to engaging in a study abroad experience (i.e., to enhance their cross-cultural skills, become more proficient in subject matter, or to socialize) shaped their cultural competence levels at post-test.

Finally, globally-related social experiences during college may play a central role in global competence development for college students. Individuals that interact with more culturally-diverse peers have been found to have higher cultural awareness and competencies (Astin, 1993a). For example, Hu and Kuh (2003) examined 53,756 college students' responses about their HEI experience. They found that students with more social interactions and friendships with people from different cultural groups than their own also had higher diversity competence when compared with those who had fewer social experiences. In the I-E-O model, the environmental factor of cross-cultural social relationships has been linked with the output of students' cultural competence (Thompson, 2008).

Current Study and Research Questions

The current study examined the association between college students' foreign language fluency, individual characteristics, and globally-related academic and social experiences with the

outcome of interest: college students' global competence. Specifically, the study addressed the following questions:

1) Are college students' foreign language fluency, individual characteristics (i.e., responsible citizenship, collective self-esteem), and globally-related academic and social experiences (travel and non-travel based) associated with their global competence?
2) Do the degree and type of college students' globally-related academic and social experiences (travel and non-travel based) relate to their global competence above and beyond the effect of foreign language fluency and/or individual characteristics alone?

Methodology

Participants

The sample was drawn from a group of college women at a mid-sized, Southeastern, public university. Participants were enrolled in the Young Women Leaders Program (YWLP), a service-learning initiative that pairs college women with middle school girls for a year of combined group and one-on-one weekly mentoring (Lawrence, Levy, Martin, & Strother-Taylor, 2008). YWLP began incorporating a global focus into its curriculum in 2011 (Lawrence, Sovik-Johnston, Roberts, & Thorndike, 2011). In a similar way that institutions of higher education have prioritized global awareness, YWLP identified the professional and personal benefits of cross-cultural exploration and connection for both the middle school girls and college women.

The program incorporated connections between YWLP participants in the US and in "sister sites" located in Cameroon and Panama. The US mentoring groups discussed global issues and engaged in internationally-focused activities (e.g., writing letters to YWLP sisters in Panama) for 10-25 minutes in ten of the mentoring group sessions. The internationally-focused

components were a relatively small part of the larger curriculum that consists of approximately 30, two-hour sessions. During these activities, students not only explored their own identities and culture, but also learned more about international women's issues. The college student mentors also participated in a year-long course, peer supervision, and ongoing consultation related to adolescent development and mentoring best practices.

The study's sample comes from 2012-2013 participants of YWLP who were part of a larger study evaluating the program. The data utilized were collected in the spring of 2013. We chose this sample of students for the study because it consisted of upper-level college students (i.e., 2nd-4th year in college) who had had opportunities (in addition to the mentoring program) to be engaged in globally-related academic and social experiences at the college level. In terms of years at college, 34% of the participants were in their second year, 39% in their third, and 28% in their fourth. In terms of ethnic group membership, 59% identified as White or Caucasian, Anglo, European-American; not Hispanic, 16% as Black or African American, 10% as Asian or Asian American including Chinese, Japanese, and others, 6% as Mixed with parents from two different groups; 5% as Hispanic/Latino, and 4% identified as Other. Self-report surveys were distributed to the college students in April 2013 via an online survey platform (Survey Monkey). All participants provided informed consent prior to participation in the study. Surveys for the college women measured demographic information, individual characteristics, globally-related academic and social experiences, as well as their global competence. The original sample included 118 college student women. Ninety-five women completed the survey, resulting in the final sample.

Measures

Foreign Language Fluency. Foreign language fluency was assessed using a single item that queried the approximate number of languages students' spoke at the level of fluency (i.e., "how many languages do you speak fluently?")

Individual Characteristics. Given research that suggests individual characteristics can impact a person's global competence (Hunter, White, & Godbey, 2006), two self-reported scales were used in this study to assess responsible citizenship and collective self-esteem.

Responsible citizenship. The 15-item Responsible Citizenship scale (Musil, 2006) asks participants to indicate the importance of various acts of social responsibility and engagement on a four-point scale (1 = not important to 4 = essential). The items include a range of situations such as "working to end poverty," "making consumer decisions based on a company's ethics," and "voting in local, state, and national elections." In addition to items focused on civic engagement, the citizenship scale includes four items related to international issues that could have confounded with the outcome of focus for this study: global competence. To minimize this, we created a modified version of the scale that removed the four globally-related variables. These removed variables included the importance of: 1) working to reduce economic disparities between countries, 2) working to promote tolerance and respect for other nations, 3) contributing money to international relief efforts, and 4) becoming involved in activities related to global issues. The modified version of this scale showed good internal consistency, with a Cronbach's alpha of .85 (Nunnaly & Bernstein, 1994) and all corrected item-total correlations between .30 and .71 (Ferketich, 1991).

Collective self-esteem. The Collective Self-Esteem Scale was derived from the Michigan Intergroup Dialogue Survey. The survey cites that the measure was adapted from the original Luthanen and Crocker (1992) scale of collective self-esteem and modified from Phinney and

Ong's (2007) Multigroup Ethnic Identity Measure (MEIM). This measure of collective self-esteem assesses participants' feelings about their own socio-cultural group. The 9-item scale asks respondents to think about their racial/ethnic group and respond on a 7-point Likert scale (1 = disagree strongly to 7 = agree strongly) to statements asking about their social identification and pride. Sample items include "I think a lot about how my life will be affected by my race/ethnicity" and "I feel good about being a member of my racial/ethnic group." The scale had strong reliability evidenced by a Cronbach's alpha of .93 (Nunnaly & Bernstein, 1994) and all corrected item-total correlations between .60 and .86 (Ferketich, 1991) for this sample.

Globally-Related Academic and Social Experiences. To assess college students' globally-related academic and social experiences, we collected and aggregated self-reported information to calculate mean scores (see Appendix A). To indicate travel-based experiences, students reported the cumulative time they had spent traveling or living abroad in weeks. Additionally, we examined non travel-based opportunities in two areas: globally-related academic and social experiences. To assess academic experiences, respondents provided information about the number of university-level, internationally-related courses they had taken. Participants also indicated if they were learning a different language. Finally, respondents provided information about their globally-related social experiences. They responded to questions asking if they had friends from a different country, how many, and how much these relationships impacted the way they see the world on a 7-point Likert scale (0 = not at all to 10 = extremely). Table 1 includes the descriptive statistics for the study's variables of interest

Global Competence Measure (GCM). The 15-item Global Competence Measure (GCM) was developed for the present study. The GCM was informed by two frameworks: the Global Competence Matrix developed by the Asia Society (Council of Chief of Staff Officers,

2011) and the Global Competence Model developed by Global Leadership Excellence (2011). The Global Competence Matrix includes a breakdown of the aspects of global competence GCM items sought to reflect these constructs. Both models highlight: 1) the investigation of the world around one's self (e.g., "I enjoy learning about what goes on in other countries"), 2) recognition of one's own perspectives and the perspectives of others (e.g., "I enjoy thinking about problems facing the world from many different points of view"), 3) effective communication of ideas and concepts with a diverse audience (e.g., "I like sharing things about life in my country with others"), and 4) the desire to translate ideas into action with a global perspective (e.g., "I want to work to try to fix some of the problems in the world"). Participants responded on a 7-point Likert scale (Strongly Disagree to Strongly Agree). As GCM is a new measure, an Exploratory Factor Analysis was conducted and is reported in the next section. The scale for this sample had good reliability, with a Cronbach's alpha of .88 (Nunnaly & Bernstein, 1994).

Results

Preliminary Analyses

Preliminary analyses were used to screen the data and check alignment with several assumptions including univariate and multivariate outliers and multivariate normality. An Exploratory Factor Analysis (EFA) was performed in SPSS version 19.0 to determine the factor structure for the 15-item Global Competence Measure (GCM). Univariate outliers were examined within the sample and results revealed eight potential outliers ($Z > 3.29$, $p < .001$); they were deleted from the sample. Univariate normality was examined separately with visual inspection of histograms and evaluation of skewness and kurtosis. These values fell within the limits for all groups (< 1.0). Visually, the histograms demonstrated moderately normal forms.

Cattell's (1966) scree provided some support for the potential retention of four factors. A three factor model satisfied Kaiser's (1958) eigenvalue criterion and cumulatively accounted for approximately 52% of total score variance on the GCM. Factor one was defined by six items focused on cognitive elements of students' thoughts about global issues and cultures (see Appendix A). Factor two included six items that captured interest and curiosity in learning about other cultures and exploring the world. Factor three only included one item (i.e., "I think people around the world think and act in pretty much the same way"). Factor four had two items focused on communicating and sharing culture stories and concepts. Given the weak loading on factor three, we excluded this item from analyses. With only three factors retained, the measure can be divided into sub-sections with factor one labeled as cultural cognition, factor two as cultural curiosity, and factor three as cultural communication. Internal reliability estimates were adequate for cultural cognition (Cronbach's alpha of .853) and curiosity (.837); cultural communication was the least reliable subscale (.578).

Correlations

Next, we explored the association between the study's independent variables and the outcome of interest. We assessed if college students' foreign language fluency, individual characteristics (i.e., responsible citizenship, collective self-esteem), and globally-related academic and social experiences (travel and non-travel based) were associated with their global competence. Pearson's correlational analyses revealed a significant, positive association between the independent variables and global competence for all variables, excluding the number of friends that students' reported having from a different country than their home country, $r = .18$, $p = .14$. Table 1 details the significant correlations between individual characteristics (responsible citizenship, collective self-esteem), globally-related academic and social

experiences (travel, learning another language, number of globally-related courses, and impact of friendships with individuals from different countries), and students global competence. Given the high correlation between the "impact of friendships with individual from different countries" variable and global competence (r =.63, p < .001), we tested for multicollinearity The VIF of and tolerance scores of 1.00 fell within the acceptable range.

Hierarchical Linear Regression

A hierarchical linear regression addressed the second research question assessing the degree and type of globally-related academic and social experiences that relate to global competence above and beyond the effect of foreign language fluency and/or individual characteristics alone. This approach enabled comparisons between travel and non-travel based globally-related experiences. The model entered the input/environment variable in the first block (foreign language fluency) and covariates in the second (collective self-esteem and responsible citizenship). We then entered the three types of environment variables in the third, fourth, and fifth blocks (globally-related travel, academic, and social experiences). This approach allowed for comparisons across models to examine the outcome for travel and non-travel based international experiences. Table 2 includes the standardized coefficients for college students' global competence outcomes based on these variables.

In step one, foreign language fluency did not predict global competence (β = .20, p = .15) and the model was not significant, R^2: F(1, 49) = 2 .13, p = .15. In the second step, collective self-esteem significantly predicted global competence (β = .20, p = .15) with an adjusted R^2 of .14, suggesting that 14 % of the variance in scores was explained by this variable (ΔR^2=.15, F(3, 47) = 3.67, p = .02). In the third step, length of time spent abroad (travel-based globally-related experience) alone predicted global competence (β = .26, p = .05), when controlling for the

variables from the first block, ΔR^2 =.06, $F(4, 46) = 3.88$, p = .01. In the fourth step, collective self-esteem (β = .26, p = .05) and the number of globally-related university-level courses (β = .32, p = .02) were associated with global competence, ΔR^2 =.14, $F(6, 44) = 4.73$, p = .001. In the fifth, and final, step, the impact of having friends from a different country than one's home country was the only variable that predicted students' global competence outcome (β = .64, p < .001). This final model, controlled for all input, covariate, and environmental (travel and non-travel based) variables and accounted for 62% of the variance in students' GCM scores, ΔR^2 =.29, $F(8, 42) = 11.47$, p < .001

Discussion

A great deal of the research on students' global competence development has focused on travel-based experiences alone. Findings from this preliminary study expand beyond this and explored alternative ways that HEIs might build students' global competence skills. Overall, our results support the utility of non-travel based methods for student global competence development. Specifically, friendships between culturally diverse individuals were strongly associated with students' global competence. While these results are based on association not causality, they do underline the importance of HEIs supporting social interactions and meaningful multicultural relationships during college.

Our findings also highlight the role of the two individual characteristics included in the study –responsible citizenship and collective self-esteem—in the development of college students' global competence. That participants' collective self-esteem was linked with the outcome of interest suggests that college students' strong understanding of and commitment to their own culture may be an important component of their developing an appreciation for other cultures.. A student's self-reflection and knowledge may inform their ability to engage

effectively across cultural divides. As an example, higher levels of awareness of and connection to one's own cultural identity may increase success navigating cultural differences or challenges that present themselves. While additional research is needed to determine the specific processes underlying the association between these two concepts, it might be useful for HEIs interested in increasing their students' global competence to consider intentionally incorporating self-reflection and awareness-building opportunities for students as they construct global competence development initiatives.

We also investigated both travel and non-travel based experiences present in the HEI environment. As expected, the length of time the students reported living, working, and traveling abroad was related to their global competence. This finding has robust support in the literature on college students' global awareness and skill development. A wealth of research on study abroad has established that the length of time spent abroad impacts intercultural communication skills (Williams, 2005), general intercultural competence (Deardorff, 2006), and global perspectives (Pedersen, 2009). Considering this, it was not surprising that participants who spent more cumulative time abroad also reported higher global competence. These travel-based, lived experiences can help students apply and refine abstract cultural skills in an individualized way. Additionally, the more time students spend abroad, the more opportunities they have to form cross-cultural relationships, build knowledge that supports their skill development, and gain comfort with novel international situations.

While we predicted that travel-based experience would certainly play a role in students' global competence, we also wanted to investigate alternative means to achieve this outcome. Despite its established benefits for college students' global competence development, not all students can (or will) participate in study abroad and other travel-based opportunities. Thus, it is

vital to explore other ways to shape students global competence using the resources available on campus and in the community. Our results identified that the number of globally-related university courses a student had taken was associated with global competence scores, suggesting that academic exploration of international issues—past and present—shapes how students engage with different cultures. Again additional research is need on the specific underlying associative processes, but it may be that obtaining global knowledge through academic classes serves as a foundation to help students more easily engage in the more social and affective aspects of global competence development during college.

Perhaps the most notable finding from our study is the strong association between friendships and global competence. Students who reported having friends from different countries than their own also had higher global competence scores. While the number of international friendships alone was associated with the outcome, the self-reported impact of these relationships mattered even more. Students who noted that their cross-cultural friendships had a significant impact on the way they saw the world also had higher levels of global competence. The analysis model that included these meaningful social experiences accounted for 63% of the variance in college students' global competence scores.

Although initially surprising, this finding makes sense when viewed in the context of college student development in general. During the developmental period of emerging adulthood, college students' peer relationships play a vital role in identity formation (Brown & Larson, 2009, Laursen & Williams, 1997; Seiffge-Krenke, 2013). As young people move from adolescence to young adulthood, social relationships help shape their lasting worldviews, values, and beliefs (Gurin, et al., 2002). Globally-related social relationships during college offer students an ongoing venue to practice understanding and apply their developing cross-cultural

skills. Alternatively, students in these relationships may have a higher investment in gaining global competence skills in order to effectively maintain cross-cultural friendships. To better understand the association between college students' social relationships and the development of their global competence, future research should consider a longitudinal design. In addition, Allport's (1954) intergroup contact theory (ICT) may be a useful model for conceptualizing how these friendships can enhance global competence.. ICT hypothesizes that effective intercultural relationships depend on equal status, shared goals, intergroup cooperation, and institutional support. It may be that college students' globally-related social relationships, especially impactful ones, include these four components.

Limitations

This specific sample consisted of female college students working with youth. All participants were part of a service-learning mentoring program that incorporated globally-related topics and activities. Further research is needed to determine if results from this study are generalizable to a wider college student population. One of the most significant limitations is that the analyses assessed associations between variables of interest, not causality. It may be that college students who enter with higher global competence are more likely to seek out relationships with individuals from different countries and be successful because they have more developed skills in navigating cultural situations. Using the I-E-O model as designed by Astin in a longitudinal, multi-institutional design to investigate these concepts would be useful. Future longitudinal techniques could include more input or baseline variables related to travel and non-travel-based global experiences prior to college as well as during college in order to determine HEI environment's unique influence on students' global competence development

Conclusion and Implications

Results from this study may inform HEIs about additional ways they can intentionally support the development of their students' global competence. Our findings suggest that while time spent abroad can be an important contributor to college students' global competence development, other campus-based experiences are also significant. In particular, globally-related course offerings, workshops, and learning opportunities that allow students to explore other cultures as well as develop a sense of themselves as responsible citizens can play a role in enhancing their global competence. In addition, HEIs can capitalize on the international diversity of their student body already present on their campuses. Providing and supporting opportunities for students to develop social relationships among globally diverse students may be an important vehicle for developing all students' global competence. This might be especially true for students who cannot study abroad. Institutional support for globally-related social engagement (e.g., international living/learning communities, cross-cultural orientation groups) may help students develop social relationships that enhance their own and their peers' global competencies.

As the world becomes more interconnected and diverse, preparing college students to become globally competent becomes increasingly essential. Higher education institutions are uniquely poised to impact college students' development as individuals and shape their holistic experience. Results from this study underscore the importance of cultivating rich, varied opportunities for globally-related academic and social experiences beyond study abroad to shape college students' global competence.

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Table 1.

Correlations and Descriptives of Study Variables (N = 94)

Measure	1	2	3	4	5	6	7	8	9
1. Foreign Language Fluency	-	0.22	0.24	0.18	0.18	0.32**	0.04	0.10	0.28*
2. Responsible Citizenship		-	0.13	0.03	0.31*	0.21	-0.03	0.12	0.37**
3. Collective Self-Esteem			-	0.15	0.20	0.04	0.06	0.20	0.25*
4. Sum Time Abroad (Weeks)				-	-0.12	0.26*	0.41**	0.28*	0.30*
5. Learning Another Language					-	0.26	-0.04	0.20	0.34*
6. No. University-Level Courses						-	0.15	0.29*	0.45**
7. No. Friends Other Country							-	0.28*	0.18
8. Impact of Friendship								-	0.63*
9. Global Competence (GCM)									-
M (N=95)	0.26	3.29	4.11	14.95	0.59	2.88	11.81	5.06	5.69
SD	0.44	0.48	1.50	29.81	0.50	3.20	24.56	1.53	0.69

*p < .05. **p < .01.

Table 2: Summary of Hierarchical Linear Regression Analyses Predicting Global Competence (n=95)

Predictors	Block 1 β	Sig	Block 2 β	Sig	Block 3 β	Sig	Block 4 β	Sig	Block 5 β	Sig
Block 1: Input										
Language Fluency	.20		.09		.05		-.07		.05	
R^2	.02									
F	2.13									
Block 2: Co-Variates										
Collective Self-Esteem	*.32*	*	.28	*	.24		.26	*	.09	
Responsible Citizenship	*.28*	*	.23		.23		.12		.12	
R^2			.14							
F			3.67	*						
Block 3: Environment (Travel-Based)										
Length of Time Spent Abroad	*.31*	*	*.26*	*	.26	*	.23		.09	
R^2					.19					
F					3.88	*				
Block 4: Environment (Academic)										
Number of Courses	*.42*	**	*.41*	**	*.36*	**	.32	*	.14	
Learning Another Language	*.28*	*	*.21*		*.27*	*	.20		.09	
R^2							.31			
F							4.73	**		
Block 5: Environment (Social)										
Number of Friends	*.19*		*.21*		*.13*		*.11*		-.03	
Impact of Friendships	*.76*	***	*.71*	***	*.69*	***	*.63*	***	.64	***
R^2									.63	
F									11.47	**

*p < .05. **p < .01. *** < .001

Note: Items in italics represent standardized betas if that variable had been entered in the block.

Appendix A

Global Competence Measure (GCM)

Instructions: Please answer all questions using a scale of 1 (meaning you strongly disagree) to 5 (meaning you strongly agree). Circle the response you feel most fits your opinions.

Cultural Cognition

1. Most days, I don't really think much about other countries or cultures.
2. I think it is important to work to make the whole world a better place.
3. I enjoy thinking about problems facing the world from many different points of view.
4. I think about what daily life is like for people in different countries.
5. I often think about the different problems that people in other countries face.
6. I want to work to try to fix some of the problems in the world.
7. I think that I can make a difference in the world.

Cultural Curiosity

8. I have had many opportunities to learn about other countries and cultures.
9. I enjoy learning about what goes on in other countries.
10. I want to visit other countries in the world.
11. I want to learn more about people from different countries and cultures.
12. I think it is important to learn to speak and understand different languages.
13. I like hearing stories about different countries and cultures.

Cultural Communication

14. I often talk with others about things going on around the world.
15. I like sharing things about life in my country with others.

Background Information[2]

1. What year at university are you?
2. How old are you? (please respond with just a number)
3. What is your race? Please choose one or more.
4. What country are you from?
5. What is your major or area of study?
6. Are you a domestic student or international student?

[2] **Bolded items** were included in the reduced variable list for the study.

Globally-Related Academic and Social Experiences

1. Have you taken any courses related to international or cultural studies at the university level?
2. **How many university-level courses related to international or cultural studies have you taken? (Put 0 if none).**
3. Do you participate in a CIO or other organization at the university related to international issues?
4. How many HOURS per MONTH do you spend involved with organizations related to international issues? (put 0 if none)
5. Have you studied abroad while at university?
6. How long have you studied abroad?
7. Have you ever participated in service work abroad?
8. How long have you participated in service work abroad?
9. How interested are you in participating in the international experience listed below in the future? (0 – Not at all to 10 – Extremely interested)
    a. Study Abroad
    b. Working Abroad
    c. Traveling Abroad (less than 3 months)
    d. Living Abroad (more than 3 months)
    e. Service Work Abroad
    f. Research Abroad
    g. Other International Experience
10. Have you ever traveled to a country other than your home country for LESS THAN 3 MONTHS?
11. Please estimate the number of countries you have traveled to for less than 3 months (put 0 if none).
12. **Summing all the countries you have traveled to for less than 3 months at a time, how long have you spent traveling abroad IN WEEKS? (put 0 if none)** ***For example: 1) 2 weeks in Panama City (Summer 2012), 2) 1 week in Guatemala (Summer 2010), 3) 1 month in France (Fall 2007) = 7 weeks total***
13. Have you ever lived in a country other than your home country for MORE THAN 3 MONTHS?
14. Please estimate the number of countries you have lived in for more than 3 months. (put 0 if none)
15. **Summing all the countries you have lived in for more than 3 months at a time, how long have you spent traveling abroad IN WEEKS? (put 0 if none)** ***For example: 1) 6 months in Kenya (Summer 2012), 2) 1 year in Mexico (Summer 2010), 3) 5 months in Spain (Fall 2007) = 92 weeks total***
16. **Are you currently learning another language in addition to your first?**
17. How many languages are you learning?

18. Do you speak more than one language fluently?
19. How many languages do you speak fluently?
20. Do you have friends who are from another country than your home country?
21. If you do you have friends who are from another country than your home country, how many? Give your best guess.
22. How much do these friendships impact the way you see the world? (1 – These friendships do not impact the way I see the world to 7 – These friendships have an extremely significant impact on the way I see the world)
23. Do you have family members who are from another country than your home country?
24. If you do you have family members who are from another country than your home country, how many? Give your best guess.
25. How much do these family members impact the way you see the world? (1 – These family members do not impact the way I see the world to 7 – These family members have an extremely significant impact on the way I see the world)