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Study Abroad as a Transformative Experience: Measuring Transformative Learning Phases and Outcomes

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ABSTRACT

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The purpose of this study was to verify Mezirow's (1978) Transformative Learning
Theory as a model to explain how study abroad participation facilitates efforts to internationalize
students in higher education. Specifically this study used block-entry, logistic and linear
regression models to explore the relationship between transformative learning processes and
study abroad outcomes. Data were collected from business students ($N = 107$) at Brigham Young
University using a retrospective pretest method. Findings indicated transformative learning was
occurring in short term study abroad settings and transformative learning phases were related to
increases in Intercultural Competence. These findings were consistent between year cohorts
suggesting the impacts were lasting.

ACKNOWLEDGMENTS

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Phases and Outcomes

During the 2011/2012 academic year approximately 283,000 U.S. students studied

abroad as part of their enrollment in an institution of higher education (NAFSA, 2014). This

number represents only about 1% of the total student population for that year (IIE, 2013). In the

wake of this report, the Institute of International Education's (IIE) President and CEO Dr. Allan

E. Goodman stated: "We need to increase substantially the number of U.S. students who go

abroad so that they too can gain the international experience which is so vital to career success

and deepening mutual understanding" (IIE, 2013, p.2). In line with this thinking, "shifts

[towards internationalization] are said to be occurring in higher education pedagogy, where

efforts are being made to expand the social, cultural, and human capital of universities and their

local communities through experiential learning and active partnership" (Bamber & Hankin,

2011, p. 190). Internationalization refers to "any systematic, sustained effort aimed at making

higher education [more] responsive to the requirements and challenges related to the

globalization of societies, economy, and labor markets" (Van der Wende, 1997, p. 53). It is

imperative that institutions of education pursue this goal through sound pedagogical methods

(CIBER, 2001). Though purposive recreation programs such as study abroad have become a

standard tool for achieving the goal of internationalization, their efficacy and effectiveness are

still under scrutiny (Altbach & Knight, 2007; NAFSA, 2011).

In response to this skepticism, scholars have endeavored to empirically demonstrate

whether study abroad does in fact provide unique and impactful opportunities for learning about

the world (Foronda & Belknap, 2012; Ritz, 2011). Researchers have recently turned to John

Mezirow's transformative learning theory in an attempt to understand and explain the educative

potential of study abroad (Hutchison & Rea, 2011; Ogden, 2010; Trilokekar & Kukar, 2011). Transformative learning theory suggests perspective transformation—seeing the world in a different way—occurs as a person encounters a disorienting dilemma and passes through a set of ten phases that solidify the change (Mezirow, 1978; D'Amato & Krasny, 2011). Previous qualitative findings suggest perspective transformation and elements of the transformative learning process can and do occur in study abroad settings (Hutchison & Rea, 2011; Ogden, 2010; Trilokekar & Kukar, 2011). Quantitative support for these claims is wanting in transformative learning literature (Cheney, 2010; Taylor, 2007).

Similarly, study abroad facilitators and practitioners have neglected to provide quantitative, outcome or evidence based research to support their advertised impacts (CIBER, 2001). Lacking in both transformative learning and study abroad literature are programmatic and theoretical connections between study abroad processes or activities and study abroad outcomes. Creating these links between program activities and outcomes, what Harachi, Abbott, Catalano, Haggerty, and Fleming (1999) call "opening the black box," (p. 711) is of chief concern to study abroad program facilitators. Establishing these links and providing evidence of these outcomes in the context of study abroad, could potentially provide justification for continued investments in internationalization efforts in higher education and inform study abroad programming. Therefore, the primary purpose of this study was to quantitatively verify Mezirow's transformative learning theory as a model to explain the academic value of study abroad. The secondary purpose was to explore the relationship between transformative learning processes and study abroad activities and outcomes.

Literature Review

In line with the aims of the present study, this section reviews research on the following topics: (1) Mezirow's transformative learning theory, (2) transformative learning processes in the context of study abroad, and (3) study abroad outcomes.

Transformative Learning Theory

A dearth of research exists to describe the study abroad learning process and aspects of the process that motivate changes in perspectives or behaviors (Engle & Engle, 2003). Most study abroad research uses the theory of planned behavior or theory of reasoned action frameworks to describe intentions or motivations for participation (Duerden & Witt, 2010; Goel, de Jong, & Schnusenberg, 2010; Presley, Damron-Martinez, & Zhang, 2010). One study sought to interpret study abroad learning through the lens of Social Learning Theory, focusing specifically on the impact of social processes on study abroad outcomes (McLeod & Wainwright, 2009). Though the findings in this study were positive, the theory itself only touched on one component of the study abroad learning process. Other theories targeted the achievement of single study abroad outcomes and again provided a less comprehensive view of the study abroad process as a whole. As the majority of study abroad outcomes are perspective oriented—for example, changing cultural perspectives and understanding, increasing personal efficacy, and modifying career and academic intent—the transformative learning framework may be a best-fit model for promoting those outcomes, filling the need for theory-based, study abroad programming.

Transformative learning theory endeavors to elucidate the adult learning process (Taylor, 2007). Mezirow (1978) first conceived the idea of transformative learning in the mid 1970s as part of a descriptive study of women in academia. The qualitative study aimed to determine how

older women adjusted to university learning after an extended period of absence. As a result of

the study, Mezirow identified and delineated 10 phases to describe the process of learning and

promote perspective transformation for these women (Kitchenham, 2008). These phases

include:

1. Experiencing a disorienting dilemma

2. Undergoing self-examination

3. Conducting a deep assessment of personal role assumptions and alienation created by

    new roles

4. Sharing and analyzing personal discontent and similar experiences with others

5. Exploring options for new ways of thinking

6. Building competence and self-confidence in new roles

7. Planning a course of action

8. Acquiring knowledge and skills for action

9. Trying new roles and assessing feedback

10. Reintegrating into society with a new perspective. (Coghlan & Gooch, 2011,

     pp. 716-717)

Kitchenham (2008) suggested the phases do not have to be experienced sequentially or in their

entirety; however, Brock (2010) discovered the more phases an individual experienced, the more

likely they were to report perspective transformation.

Mezirow (1996) defines transformative learning as "the process of using a prior

interpretation to construe a new or revised interpretation of the meaning of one's experience in

order to guide future action" (p. 162). In later works, Mezirow expanded his definition of

transformative learning to include the following characteristics:

Transformative learning refers to the process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs…that will guide to action. (D'Amato & Krasny, 2011, p. 239)

O'Sullivan, cited in a study by Coghlan and Gooch (2011), expanded on Mezirow's demarcation stating transformative learning requires "a deep structural shift in the basic premises of thought, feelings and actions. It is a shift of consciousness that dramatically and irreversibly alters our way of being in the world" (p. 716). Consequently, he continued, "the individual undergoing change becomes conscious of him or herself as situated within larger political, economic, sociocultural, and spiritual forces" (Coghlan & Gooch, 2011, p. 716). In sum, transformation is ignited as one experiences a paradigmatic shift in thinking and culminates in action guided by a newly developed worldview.

Transformative Learning Processes at Work in Study Abroad

Trilokekar and Kukar (2011) posit "transformative learning theory provides a framework for understanding how 'lived experiences' provide a context for making meaning of the world" (p. 1141). In response to this supposition, Dubouloz et al. (2010) echoed Taylor's (2007) call "for more research on the significant influence of context, and the varying nature of the catalyst of the transformation process" (p. 283). In answer to this call, a variety of qualitative studies have described how international study settings serve as a unique context and catalyst for transformative learning to occur (Brown, 2009; Chang et al., 2012; Hutchison & Rea, 2011; Ritz, 2011; Trilokekar & Kukar, 2011). These studies identify elements of study abroad that either inhibit or promote perspective transformation.

Blocks to transformation. In a one year follow up with study abroad participants, Jones et al. (2011) found what takes place after the international experience can be just as vital as what takes place during. Students in this study reportedly fell into one of two groups: (a) those who felt they had truly changed; students who continued to travel and express concern for international issues and (b) those who felt the change was not as deep or lasting as originally reported; students who allowed prior commitments, school deadlines, and other constraints to interfere with the final phase of transformation (Rowan-Kenyon & Niehaus, 2011). In either case, just as there are factors that promote transformative learning, there are also those that inhibit transformation.

In a study of 34 pre-nursing students' participation in a study abroad program, Foronda and Belknap (2012) determined three factors could potentially stop transformation from occurring: (a) Egocentrism/emotional disconnect, (b) perceived powerlessness/being overwhelmed, and (c) vacation mindset. Emotional disconnect occurs when we put ourselves and our needs against those of others. We withdraw or build walls rather than expressing empathy or seeking to understanding another view, hindering our ability to change our perspective. Perceived powerlessness occurs when we have a desire to act but feel ill-equipped or unable to do so. We may have experienced perspective change but it does not convert to action. Duerden, Witt, and Taniguchi (2012) determined this block may stem from difficulties communicating our experience to non-participants upon returning home. The vacation mindset is manifest in engagement in purely recreational travel; travel in which we do not immerse ourselves deeply enough in the culture to experience the disorientation needed to trigger transformation. The present study sought to control for these affects by including constructs reflecting student motivations and prior international experiences.

In addition to the blocks to transformation, the impact of duration (in terms of program length) on transformative learning outcomes is still unclear (Dwyer, 2004; Foronda & Belknap, 2012; Ritz, 2011). One study comparing a yearlong sojourn to short term studies abroad, suggests the longer trip duration provides more direct impacts (Foronda & Belknap, 2012). Foronda and Belknap (2012) also found students perspectives had changed during their short term international stay, but their commitment to act and or change their habits had not. On the contrary, Dwyer (2004) found study abroad experiences influenced future engagement in international work, the development of useful career skills, and the desire to work overseas for participants regardless of the length of the trip; however, these findings were less significant for short term study abroad participants when compared to those who had stayed a full-year. Other studies also proposed transformative learning can and does occur in short term study abroad (Ritz, 2011; Jones et al., 2012). The present study examined differences between year cohorts in order to illuminate the effect of duration on study abroad outcomes.

Factors promoting transformation. Study abroad can act as a disorienting dilemma or catalyst to the transformative learning process. Ritz (2011) delineated this connection: "New experiences that contest held beliefs and promote acknowledgement of and reflection on these experiences are foundations for development of study abroad experiences that provide opportunities for transformative, emotional, and social learning to occur" (p. 168). In line with this thinking Brown (2009), reporting on a one year follow-up with study abroad participants, described how students experience the disorienting dilemma "as a result of exposure to diversity and of the geographical and emotional distance from the home environment" (p. 517). In another study, this dilemma occurred as students attempted to "relieve the stress and anxiety" of living in a place where values and lifestyles were different than their own (Brown, 2009, p. 508).

Chang et al. (2012) found "different stimuli from new environments served as the triggers that led participants to recognize and reexamine their existing perspectives and mental frameworks" (p. 238). These triggers were said to have been both direct (new foods) and implicit (differing values, tempos, etc.). Additionally, studies identified "culture shock" and "panic anxiety" (Trilokekar & Kukar, 2011, p. 1142), "incongruity" (Ritz, 2011, p. 167), and feeling "outside [your] comfort zone" (Hutchison & Rea, 2011, p. 557) as common triggers to transformation in study abroad.

Coghlan and Gooch (2011) describe how co-travelers provide a sounding board for self-examination, exploring, and sharing. The authors argue fellow participants in international service trips "play a role in questioning and challenging a learner" (Coghlan & Gooch, 2011, p. 721). Hutchison and Rea (2011) spoke of the importance of coordinating daily meetings to allow participants to discuss and reflect on their experiences. These discussions can occur in a variety of different dyads or groups and in the case of study abroad might occur between fellow participants, a facilitator and participant, or a member of the destination community (Mezirow, 2000). Duerden & Witt (2010) confirmed these findings; they demonstrated socialization processes facilitate and mediate outcome achievement for participants in international immersion programs. Hutchison and Rea (2011) postulate this type of socialization and social learning will produce outcome-related change when oriented to the purposes of the study abroad.

Trilokekar and Kukar (2011) reported study abroad participants were likely to try out and test their new roles and beliefs because they had a new peer group and community in which to do so—a clean slate so to speak. The authors specifically described how "being an outsider in their host society and being away from home enabled more risk-taking behavior, an opportunity to experience a new or different identity" (p. 1146). Chang et al. (2012) supported these findings

suggesting a new location and culture is the prime place to explore, try, and test an evolving identity. Finally, study abroad research, like traditional transformative learning research, states transformation is not really complete until new worldviews have been integrated into the individual's life (Coughlan & Gooch, 2011). Interestingly, in the present study reported intentions to act or reintegrate worldviews were heavily influenced by the study abroad experience and are predictive of long-term transformative learning (Hutchison and Rea, 2011).

As evidenced in these studies, factors such as motivation, preparation, and trip duration can constrain one's ability to experience a perspective transformation. However, in spite of these potential blocks, transformative learning phases and resultant perspective transformation appear to be occurring in study abroad. Though the nature of these phases has been studied in detail, measurement of their impact on transformative learning and study abroad program outcomes is lacking.

Study Abroad Outcomes

Study abroad is believed to deliver a variety of outcomes oriented towards the internationalization of students (Foronda & Belknap, 2012; Jones, Rowan-Kenyon, Ireland, Niehaus, & Skendall, 2012; Ogden, 2010). The American Institute for Foreign Study (AIFS), an established organization oriented towards providing quality international education services to young adults throughout the world recently indicated the impact of study abroad experiences is multifaceted and typically affects the following three domains: (a) cultural understanding and world views, (b) professional and career development, and (c) personal growth and values (AIFS, 2013). The Center for International Business Education and Research (CIBER) at Michigan State University (MSU), established in 1965 and administered by the U.S. Department of Education, recently held a roundtable conference to discuss the direction of study abroad

outcome assessment in higher education. Their findings align with those of the AIFS; however, they reported study abroad outcomes typically fall within five categories:

1. Academic progress and intellectual development

2. Attitudes, e.g. tolerance towards others, self-confidence, cultural attitudes

3. Skills, e.g. foreign language proficiency, coping with ambiguity, critical thinking

4. Understanding and appreciating the world and one's place in it, e.g. reflection on other and one's own cultures, perspectives on the role played by politics in the human condition

5. Effect on one's place in society, e.g. employment opportunities, ability to improve job performance.

In addition to delineating key outcome areas, the MSU CIBER also made recommendations for selecting appropriate outcomes. These recommendations were elicited from the 2010 Forum for Education Abroad. Among their recommendations is the mandate that "discipline specific faculty need to identify appropriate outcomes" (CIBER, 2001, p. 11).

Transformative learning studies revealed outcomes consistent with CIBER (2001) and AIFS (2013) findings. In their review of study abroad literature, Foronda and Belknap (2012) reported study abroad "increase[ed] cultural awareness, sensitivity, and competence… [And] promoted cognitive development and personal growth" (p. 1). Jones et al. (2012), in their assessment of study abroad literature, enumerated the following outcomes: "academic gains, increased knowledge of…diversity, improved ability to work with others, leadership, etc." (p. 202). Additionally, "flexibility and openness…cultural adaptability… [The] improved ability to recognize and appreciate cultural differences…and increased interest in learning about international affairs" were reported in this study (p. 202). In Ogden's (2010) summary of study

abroad research, "students returning from abroad were, [reportedly], more interested in international affairs, showed significant foreign language gains, and many laid plans to pursue internationally-oriented careers" (p. 17).

Study Abroad Outcomes and Transformative Learning Activities

       Study abroad and transformative learning research have recently recommended transformative learning theory as a promising model to explain the impact of study abroad
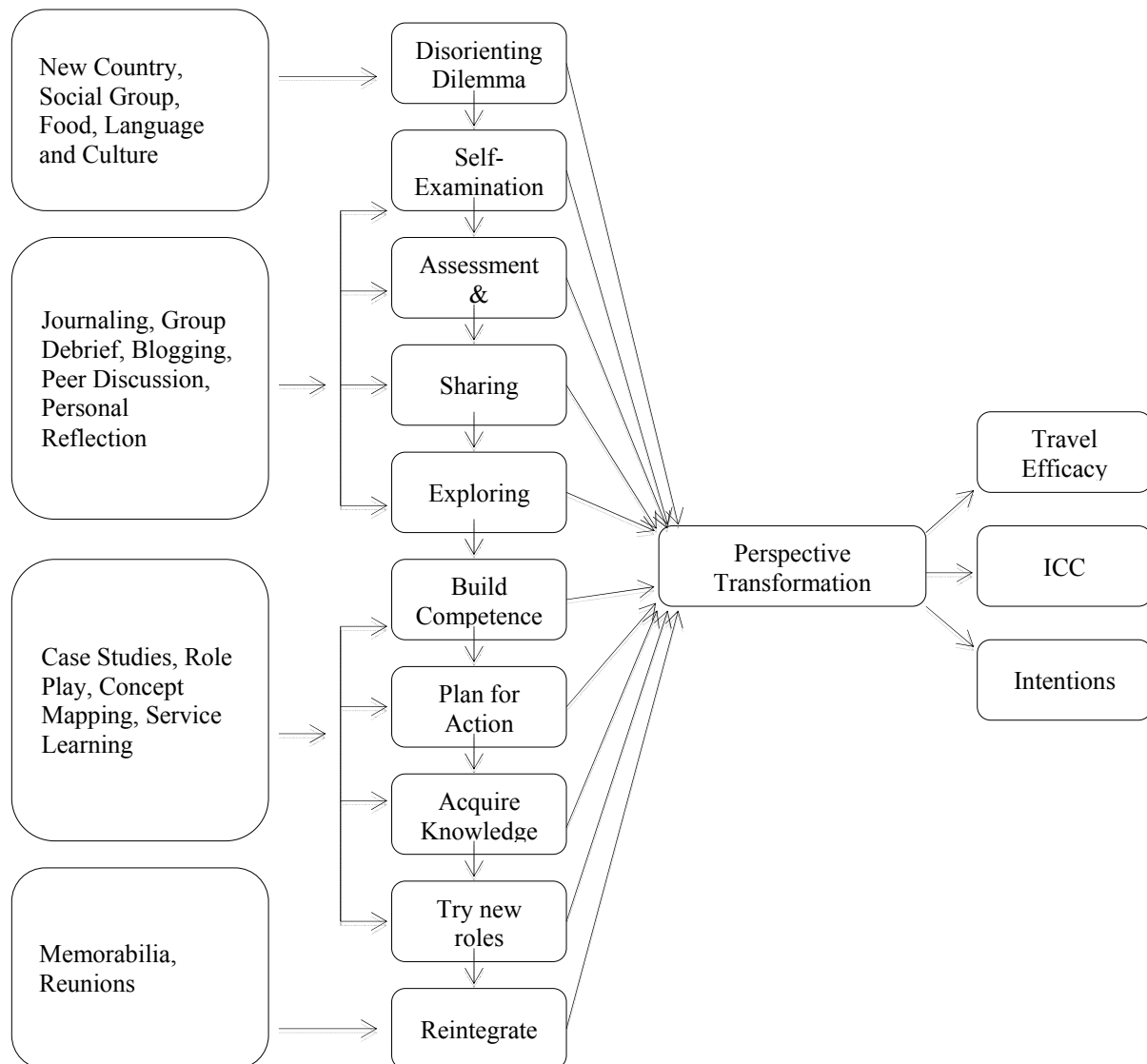
Figure 1. The Relationship between study abroad activities, transformative learning phases, and transformative learning and study abroad outcomes.

processes on study abroad outcomes (Hutchison & Rea, 2011; Ogden, 2010; Trilokekar & Kukar, 2011). The purpose of the present study was to find quantitative support for the relationship between transformative learning phases, perspective transformation, and study abroad outcomes identified in Figure 1. Specifically, it was hypothesized: (1) More than the literature established benchmark of participants (66.7%) would report perspective transformation (PT), (2) the sum of transformative learning phases experienced would relate to reports of perspective transformation and (3) there would be a positive relationship between reported perspective transformation and identified study abroad outcomes (travel efficacy, intercultural competence, and intentions).

Methods

Sample

This study employed a quasi-experimental, retrospective pretest method. Quantitative survey data were collected via web-based questionnaires from students at Brigham Young University who had studied abroad with the Yvonne and Kay Whitmore Global Management Center (GMC) in the Marriott School of Management. The questionnaire was completed by 107 students, all of which had studied abroad for two to six weeks between the summer of 2008 and the summer of 2013. Students were predominately white (87.9%), single (72.9%), and female (63.6%). The majority of students ranged in age from 20 to 24 years (70.1%) and had achieved an associate's degree or high school diploma (69.1%) at the time of report. These participant demographic trends paralleled the 2011/2012 national study abroad student profile which indicated the average study abroad participant was white (76.4%) and female (64.8%). There was some disparity in average educational attainment, likely due to the fact that a significant

portion of the students in this study had deferred their academic status for two year missionary service prior to studying abroad.

Approximately 69.3% of the students reported they were pursuing business related degrees. The Institute of International Education (2013) report indicated nearly a quarter of students who studied abroad at the end of the 2011/2012 academic year came from business or management related fields, the majority of which had participated in short term study abroad. Overall, the population was generally reflective of the average study abroad participant; however, many of the participants in this study had prior international experience and therefore were predicted to be less likely to experience perspective change and subsequent outcomes. Finally, of those who responded, 30.8% had studied abroad in the year 2013, 22.4% in 2012, 29.0% in 2011, and 17.8% in 2010 and prior, though no significant differences were identified between these groups.

Data Collection Procedures

Participating students were recruited using emails released by the David M. Kennedy Center for International Studies at Brigham Young University. The Kennedy Center acts as an information hub and springboard for intercultural development and international education. The Center's database houses campus wide, study abroad participant contact information including names, emails, and program titles. Web based questionnaires were distributed to all of the students who had participated in a study abroad between the summer of 2008 and the summer of 2013 through programs offered by the GMC housed in the Marriott School of Management. A multi stage recruitment and distribution method was employed, using Qualtrics, to increase response rates. First, introductory emails were sent to eligible students explaining the purpose of the study. Second, an email with the questionnaire link was distributed. Third, two subsequent

reminder emails were sent out emphasizing the importance of individual responses. Finally, a thank you email was distributed to those who participated (Dillman, 2000). These distribution strategies resulted in a 25% response rate. This rate fell in between Brock's (2012) 12.8% response rate and Yeboah's (2012) initial response rate, which was less than 50%. Additionally, as part of the questionnaire, students were asked to provide contact information if they would like to take part in a follow up phone interview. Those students were contacted and their responses recorded within one month of their survey participation. Responses were limited and therefore not included here.

The questionnaire employed a quasi-experimental design via the retrospective pretest method. Retrospective pretest measures function to allow a "respondent to reflect back to a previous time (usually pre-program) and indicate his or her current perception of the level of an attribute he or she possessed at that previous time" (Sibthorp, Paisley, Gookin, & Ward, 2007, p. 297). These methods are typically used to respond to problems with pre and posttest measures, specifically self report bias derived from evolving internal metrics (Davis, 2003; Pratt, McGuigan, & Katzev, 2000; Sibthorp et al., 2007). Jackson (2008) reported using a pre and posttest measure to evaluate changes in intercultural sensitivity for study abroad participants. She found respondents held "inflated perceptions of their level of intercultural sensitivity," sometimes many levels beyond what their actual sensitivity score revealed (Jackson, 2008, p. 349). Moore and Tananis (2009), in a study of short term educational programs, found respondents were consistently "overestimating their initial levels of competency" (p. 198). In contrast, the retrospective pretest approach assumes respondents will be better equipped to "define and understand the construct being measured and will be applying the same metric as they assess both pre and post program levels of an attribute" (Sibthorp et al., 2007, p. 297).

Additionally, Hadis (2005) described the challenges with overcoming the limitations of a single cell design in study abroad research. He claimed "students interested in studying abroad constitute a selective population. They are more interested than the rest of the student body in widening their horizons concerning international issues even before they study abroad" (Hadis, 2005, p.5). According to Hadis (2005) a comparable student group would need to be composed of individuals who were interested in studying abroad but unable to do so. Response rates and sample sizes for these groups are typically too low and therefore unusable (Hadis, 2005). Therefore, our comparison values are not representative of a truly matched group.

Finally, the present study evaluated outcomes identified and endorsed by discipline specific faculty in the Yvonne and Kay Whitmore Center for Global Management (GMC), housed in the Marriott School of Management at Brigham Young University (BYU). The GMC provides international work and study experiences for BYU business students. The Center aims to prepare undergraduate and graduate students for employment in international organizations, both domestic and abroad, by promoting intercultural competence, travel and language efficacy, and business oriented skills. In partnership with the GMC a logic model was developed and three outcomes identified including: (a) an attitude outcome: travel efficacy, (b) an outcome indicative of understanding and appreciation of the world: intercultural competence, and (c) an outcome measuring the impact of study abroad on one's place in society: intentions to engage in future international experiences, education, and employment. As this is a preliminary study we have selected only three outcomes/categories instead of selecting one from each of the five categories outlined by CIBER, though we have data on other outcomes which will not be reported here.

Instrumentation

The instrument used in this study was constructed using a variety of pre validated scales. These scales measure the key variables to be correlated: perspective transformation, transformative learning phases, travel efficacy, intercultural competence, and intentions. A composite score was created for each scale by obtaining the difference of the sum of the pre travel scores and the sum of the post travel scores. An average score was then created by dividing the summed difference by the number of items in the scale. Each scale is described in detail below.

LAS. Transformative learning and transformative learning phases were measured using an adapted form of the Learning Activities Survey (LAS) (King, 1998). The LAS is made up of four parts with a total of 14 questions (King, 2009). In part one the respondents reported the number and type of transformative learning phases they experienced using a check-box method. In part two they reported whether or not they experienced transformative learning and describe how this occurred in a brief free response format. In part three respondents indicated which types of learning activities they experienced using a check-box method and in part four, they completed a series of demographic questions (King, 2009). Ten interviews, 10 pilot studies, and a panel review of the instrument were conducted after its conception to establish construct validity and reliability (King, 2009). Yeboah (2012) confirmed the validity of the instrument. Scoring followed the process outlined by King and was used to authenticate responses during the data cleaning process (King, 2009). The scoring method allowed researchers to distinguish between perspective change resulting from the study abroad and perspective change resulting from unrelated events or external sources.

Travel Efficacy. In this study travel efficacy was measured using an internal scale developed by the Global Explorers organization (2011). It is comprised of four items measured on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Respondents answered how much they agreed or disagreed with statements about their beliefs in their ability to plan and prepare to travel comfortably and confidently outside of their community. Higher scores indicated higher travel efficacy (Global Explorers, 2011). Evidence of reliability was provided by the Global Explorers organization (2011) who reported a Cronbach's alpha score of 0.77. Principle component analysis (PCA) for travel efficacy revealed item 4 of 4 had a low factor loading ($h^2 = .407$); therefore, it was excluded from the model.

CAS. Intercultural competence was measured using the Cultural Awareness Survey (CAS) (Off Bound Adventures, 2013). The CAS is made up of five items measured on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Respondents answered how much they agreed or disagreed with statements about their "ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes" (Deardorff, 2006, p. 33). Higher scores indicated higher intercultural competence (Off Bound Adventures, 2013). Evidence of reliability was provided by the American Camp Association who reported an alpha score of 0.85 (Off Bound Adventures, 2013). Principle component analysis (PCA) for intercultural competence revealed all five items held together well ($h^2 > .700$).

Intentions. Intentions were measured using six pilot tested items established by the researcher and endorsed by the GMC. The scale was made up of six items measured on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Respondents answered how much they agreed or disagreed with statements about their intent to engage in future

international experiences, education, or employment. A pilot study was conducted to review the understandability and validity of questions. In this pilot study, five students with travel/study abroad experience were asked to review the questions for both coherence and face validity. They confirmed the questions were valid at their face. Additional factor analysis confirmed the items correlated well. All but item 1 ($h^2 = .285$) of the intention items had high factor loadings ($h^2 > .684$). This ill fitting item was excluded from the model.

Demographics and other variables of interest. The following variables (a) prior mission experience, (b) prior language experience, (c) prior travel experience, and (d) motivations were believed or have been shown to contribute to changes in study abroad and transformative learning outcomes. Mission experience here refers to fulltime, voluntary, religious proselyting for The Church of Jesus Christ of Latter-day Saints—usually lasting between 18 and 24 months in length. The analysis included these variables to control for spuriousness and explain variance in the models. Demographic information such as age, race, gender, declared major, and educational attainment were also included.

Analysis

To determine whether or not perspective transformation was occurring in study abroad (hypothesis 1), descriptive statistics and a one sample, one tailed t-test were used to compare the perspective transformation mean from the present study with the known benchmark value from Brock's (2010) study of business students (.48) and King's (2000) study of ESL students (.67). Brock (2010) utilized a descriptive research design to explore the extent to which business students were experiencing transformative learning in the traditional classroom setting. The sample of business students ($n = 256$) had similar characteristics to the present study in terms of race (89% white), gender (64% female), age (56 % aged 20 to 24 years), and number of

semesters completed. Brock (2010) collected survey data utilizing the Learning Activities Survey at one time point (posttest) and discovered 48% of students experienced transformative learning. King (2000) utilized an exploratory, mixed method research design to learn whether or not international students experienced transformative learning as the result of their participation in semester long, ESL programs. Though not demographically similar by race, these students (*n* = 208) were similar in age and marital status. Additionally, the ESL population was believed to be similar because they were experiencing a parallel phenomenon—being introduced into and educated in a foreign country and culture.

To examine the relationship between transformative learning phases and resultant perspective transformation (hypothesis 2) independent sample t-tests and block entry, logistic regression analyses were performed in SPSS (SPSS, 2009). In the analysis of the second hypothesis, perspective transformation (PTINDEX) served as the dependent variable. Using the block entry method, historical factors and motivations were entered in the first block. The sum of phases (SUMPHASE) was entered into the second block as the variable of interest. The SUMPHASE variable acted as a composite score, created by summing the number of phases each individual reported he or she experienced. For example, a SUMPHASE score of six would indicate a student said he or she experienced 6 of the 10 transformative learning phases. The models were then examined at an alpha level of .05. In the significant blocks, the standardized regression coefficient (Beta) was examined to identify the contribution of each variable.

To examine the relationship between transformative learning and study abroad outcomes (hypothesis 3) independent sample t-tests and block entry, linear regression analyses were performed in SPSS (SPSS, 2009). Intercultural competence acted as the dependent variable in the regression model. Using the block entry method, historical factors and motivations were

entered in the first block. The PTINDEX was entered into the second block as the variable of interest. The models were then examined at an alpha level of .05. In the significant blocks, the standardized regression coefficient (Beta) was examined to identify the contribution of each value. One-way ANOVA was used to determine if there were differences in reported perspective transformation between cohorts based on dummy coded variables indicating the year of participation.

Results

Central tendency and descriptive statistical analysis of demographic variables indicated the sample was homogenous. For this reason, demographic variables (see Table 1) were excluded from the regression models. Substantive quantitative results were reported for each of the three hypotheses.

Hypothesis 1

We failed to reject the null hypothesis. Study abroad participants did not have a statistically significant different proportion of individuals report perspective transformation when compared to ESL students ($t = -1.826$, $p = .071$). Approximately 58% of short term study abroad participants ($n=107$) reported a perspective transformation according to the guidelines outlined by King (2009). One-way ANOVA revealed no significant difference in reported perspective transformation between year cohorts ($F = .320$, p $= .864$). Interestingly there was a statistically significant higher report of perspective transformation for study abroad participants than business students in the traditional classroom ($t = 2.074$, $p = .041$), though the group is too dissimilar for this finding to hold scientific merit. Comparisons of prior studies, their population size, perspective transformation means, and program length are listed in Table 2.

Hypothesis 2

Bivariate analysis was conducted to verify the relationship between the sum of transformative learning phases and perspective transformation and the null hypothesis was rejected. An independent sample t-test comparing sum of learning phases means by the existence of perspective transformation was used to examine this relationship (see Table 3) and a significant correlation was found between the sum of phases and reported perspective transformation ($t = -8.026$, $p < 0.001$).

Multivariate analyses were conducted utilizing block entry method, logistic regressions to verify the relationship between the sum of transformative learning phases and perspective transformation when controlling for other predictor variables. In the first model (see Table 4), prior travel experience, prior mission experience, prior language experience, and motivation for travel were included in accordance with theoretical assumptions. Demographic variables (including race, gender, and marital status), and maturity level variables (number of semesters completed, educational attainment) were excluded due to sample homogeneity, small group sizes, and insignificant zero-order correlations. Results indicate the control variables did not explain a significant portion of the variance in perspective transformation ($r^2 = .029$, $p = .805$). After adding the sum of transformative learning phases into the second block there was a significant change in variance explained by the model ($\Delta R^2 = .375$, $p < .001$). The sum of the phases was the only statistically significant contributor to perspective transformation in this model ($B = .104$, $p < 0.001$).

Additional Pearson Chi-Square testing identified statistical significance in relationships between individual transformative learning phases and perspective transformation (see Table 5). Phases 1 A and B, 2 A, 5, 6, 8 and 10 more strongly related with perspective transformation

($p < .001$) while phases 4, 7, and 9 also related ($p < .05$). Only phases 2 B and 3, characterized

by agreement with previously held beliefs (phase 2 B) and deep assessment of role assumptions

resulting in alienation (phase 3) showed insignificant correlations ($p > .05$).

Hypothesis 3

Bivariate analyses were used to determine if there were significant differences between

pre and post outcome measures. Paired sample t-test indicated the means of post travel measures

were statistically different from pre travel measures (see Table 6). Post travel efficacy was

statistically different from pre travel efficacy ($t = 10.787, p < 0.001$), post intercultural

competence was statistically different from pre intercultural competence ($t = 8.154, p < 0.001$),

and post intentions were statistically different from pre intentions ($t = 5.290, p < 0.001$).

An independent sample t-test was used to determine if there was a relationship between

reported perspective transformation and changes in outcomes. The null hypothesis was

confirmed for travel efficacy and intentions; however, it was rejected for intercultural

competence. Results indicated change in travel efficacy ($t = -0.115, p = 0.909$) and change in

intentions ($t = -1.362, p = -.176$) are not statistically related to reports of perspective

transformation. Changes in intercultural competence ($t = -3.110, p = 0.002$), however, did have a

statistically significant relationship with reported perspective transformation.

Multivariate analyses were conducted utilizing block entry method, linear regression to

verify this relationship when accounting for control variables. In the first model (see Table 7),

prior travel experience, prior mission experience, prior language experience, and motivations for

travel were included in accordance with theoretical assumptions. Results indicate the control

variables explain a significant portion of the variance in perspective transformation ($r^2 = .164$,

$p = .008$). In this model, recreation motivation ($B = .345, p = .034$) significantly, positively

correlated with intercultural competence while prior travel experience ($B = -.376$, $p = .010$) and academic motivations ($B = -.325$, $p = .022$) significantly, negatively correlated with intercultural competence. After adding perspective transformation into the second block there was a significant change in variance explained by the model ($r^2 = .225$, $\Delta R^2 = .061$, $p = .008$). Perspective transformation was the only significant, positive contributor to intercultural competence in this model ($B = .320$, $p = .008$). These results indicate promising links between transformative learning processes and study abroad outcomes. Further research should continue to test this relationship with more diverse populations and sample sizes.

Discussion

The primary purpose of this study was to quantitatively verify Mezirow's transformative learning theory as a model to explain the academic value of study abroad. The secondary purpose was to explore the relationship between transformative learning activities and study abroad outcomes. Findings verified previous qualitative research claims, indicating perspective transformations are occurring in a study abroad setting. Findings supported the hypothesis that the number of transformative learning phases experienced influenced the occurrence of perspective transformation. Finally, findings indicated transformative learning had a significant influence on some, but not all, of the study abroad outcomes.

Perspective Transformation

A variety of known qualitative studies reported perspective transformation was occurring in study abroad settings (Bamber & Hankin, 2011; Ritz, 2011; Trilokekar & Kukar, 2011). This study quantitatively verified these findings, showing 58.0% of students reported perspective transformation. In a comparable quantitative study, Brock, Florescu, and Teran (2012) measured business students' transformative experience in a traditional classroom setting. Brock et al.'s

study reported 48.8% of students in this setting experienced perspective transformation. This difference in reported perspective transformation suggests study abroad may be more likely to promote perspective transformation than the formal classroom for this population (business students). Future studies should consider using a more strongly matched comparison group consisting of likeminded students who intended to study abroad but were unable to do so due to group size constraints and other factors.

Other comparable quantitative studies considered the level of perspective transformation experienced by ESL or international graduate students (King, 2000; Yeboah, 2012). Like study abroad students, the individuals in these studies experienced geographical, cultural, and language related disorientation (King, 2000; Yeboah, 2012). However, 66.7% of ESL students (King, 2000) and 61.7% of international students (Yeboah, 2012) reported experiencing perspective transformation, a slightly higher proportion than the 58.0% reported by study abroad participants. Program duration and depth of immersion likely made the ESL and international student experiences more disorienting and therefore more transformative, however, study abroad participants reported higher incidence of perspective transformation in a significantly shorter amount of time than those in international studies (see Table 2). Skeptics queried whether or not short term study abroad could provide lasting transformations (Foronda & Belknap, 2012). This study responds in the affirmative to this concern and illustrates similar effects can occur in a 2 to 6 week study abroad program that are occurring in a semester long, traditional class.

Phases of Transformation

As in prior studies (Brock, 2010; Brock, 2012), this study empirically supported the finding that the sum of the phases experienced influenced the likelihood of experiencing a perspective transformation. For every unit increase in the sum of the phases, a significant

(p < .000) .104 increase in perspective transformation is predicted. Additionally, the mean number of phases reported by those who reported a perspective transformation was 5.10 compared to 1.31 for those who did not. This finding also verified Mezirow's original theory (Mezirow, 1978), validating the transformative learning phases as markers of perspective transformation.

Findings closely matched Brock's 2010 study, and indicated the occurrence of a disorienting dilemma was the most reported phase experienced by participants. In fact, 69.4% of students who reported a perspective transformation also reported experiencing a disorienting dilemma. Hutchison and Rea (2011) elucidate this finding, saying "one of the key ways to facilitate transformative learning is to place people in a cultural setting very different from the one they are used to, thus exposing 'new' discourses" and therefore using a "pedagogy of discomfort" (Hutchison & Rea, 2011, p. 557; Trilokekar & Kukar, 2011). These new discourses result from the novelty of geography, culture, food, and language inherent to the study abroad experience. In addition to highlighting the presence and value of the disorienting dilemma, this study found the opportunities to self-examine (38.7%), explore roles (56.5%), and acquire knowledge (53.2%) and competence (43.5%) were also frequently reported by those who had experienced a perspective change.

Though these findings are promising, others indicated some of the phases of transformation may need more intentional programmatic planning. For example, only 9.7% of students indicated they had adequately assessed their assumptions in conjunction with a sense of alienation (phase 3). We suspect the intimate and persistent nature of study abroad groups may have discouraged the chance for experiencing true alienation. In other words, the built in study abroad community promotes needed group dialogue and reflection but may limit opportunities

for personal reflection and alienation (Foronda & Belknap, 2012). Additionally, in their study of the effects of short term study abroad on adult identity development, Dirkx, Spohr, Tepper, and Tons, (2010) claim lack of time may play a role in inhibiting personal reflection and other transformative learning phases. Study abroad facilitators should consider how to promote transformative learning phases by incorporating and making time for associated learning activities in their programming efforts. Activities like group reflection meetings (Hutchison & Rea, 2011), journaling, group debriefing, peer dialogue, silent reflection, and online blogging (Trilokekar & Kukar, 2011) all promote the reflection and discourse distinguishing phases of transformation. Foronda and Belknap (2012) also suggest other activities that can enhance one's ability to experience new roles and transformative phases. These include: "case studies, role play, learning contracts, group projects, concept mapping, consciousness rising, and participation in social action" (p. 159)

Outcomes

Findings indicated significant increases between pre and post travel scores were observed on all outcome variables: travel efficacy, on average, increased by 16.4%; intercultural competence, on average increased by 10.1%; and intentions, on average, increased by 5.8%. These findings provided additional evidence in support of the efficacy of study abroad programming, especially as it relates to targeted outcomes.

Though increases were experienced on all of the intention items, descriptive statistics revealed that the majority of students intended to act in one of three ways. First, students reported their intent to work for a domestic organization that operates internationally (55%). Second, students reported their intent to participate in an additional study abroad or travel experience (47%). Third, students reported their intent to pursue additional language training

(43%). University faculty may consider developing curriculum to help promote the realization of these intentions, providing follow up courses, lectures, or internship opportunities. These types of follow up activities may also help facilitate post program reflection and ensure the effects of the study abroad are sustained.

Of the observed outcomes only intercultural competence increased in relation to increases in perspective transformation. However, we believe with increased sample sizes and more direct programming, transformative learning would likely predict increases in other outcomes as well. The existing relationship between perspective transformation and intercultural competence is likely due to the types of items that make up the intercultural competence outcome. These items are all oriented towards changes in values and perspectives; therefore, it makes sense transformative learning phases would influence the process of revising one's intercultural perspectives. Interestingly, in addition to perspective transformation, prior travel experience and motivation also affected intercultural competence.

Prior Travel experience. Dirkx et al. (2010) found those who had prior travel experience were less likely to experience perspective transformation during their study abroad. The present study provided additional empirical evidence to support this claim, finding students who reported prior travel experience were less likely to experience changes in their intercultural competence and perspective transformation. This phenomenon is likely a manifestation of desensitization, meaning students who have traveled before, especially to the programmed host country, are less likely to find the experience disorienting. Since the process of perspective change is ignited by a disorienting dilemma, the removal of this crucial element would likely decrease a student's likelihood of engaging in the transformative learning process and resultantly experiencing a perspective transformation.

Motivation. Findings from this study also indicated those who were career or academically motivated were less likely to experience changes in intercultural competence and other outcomes. Dirkx et al. (2010) reported similar findings and provided the following explanation: "In general, those with vague academic intentions tended to express more openness to new experiences on the tour, while those with specific academic intentions reported interest in experiences that articulated with these intentions" (p. 124). In other words, students whose goals were less focused or whose expectations were more open were more likely to report changes in outcomes. Foronda and Belknap's (2012) description of blocks to transformative learning explain this phenomenon as well. They posit ego-centrism or an emotional disconnect can inhibit one from experiencing outcome changes. Therefore career or academically focused individuals may be less emotionally driven or connected to the culture or experience. Interestingly, findings from this study found those with a more holistic or recreation based motivation were more likely to experience changes in intercultural competence and other variables which may contradict Foronda and Belknap's (2012) proposition that a "vacation mindset" can also block these changes (p. 157). These students may have had less defined goals or expectations and were therefore more open to experience perspective change detached from their career or academic ambitions.

Limitations

This study was limited by a small, homogeneous sample (*n=107)* limiting data extrapolation and tempering the level of statistical analysis possible. Statistical testing investigating differences based on educational attainment or program of participation could not be conducted because of the lack of variance and low group sizes in the sample. For this reason we are unsure of the effects of the location or facilitator on outcome achievement. This

limitation could be overcome by a larger sample size through improved survey design; i.e. offering an incentive or distributing paper copies of the survey, in person, at the end of the program.

Additionally, the evaluation protocol employs a post trip, retrospective pretest method, relying on the individual's ability to recall attitudes and abilities from the past. This may bias or create error in responses. This was especially true considering individuals were looking back across different lengths of time (e.g. one to five years). However, chi-square and ANOVA testing verified that there was no variation in responses based on year of participation ($F = .620$, $p = .864$). This confirms Mezirow's proposition that transformations have long term effects (Mezirow, 1996).

Finally, this study was limited by the lack of a truly matched comparison group. Though comparable groups were identified in the literature, these groups did not match on all relevant criteria. Because it is challenging in study abroad research to generate enough matched respondents, this particular limitation is hard to overcome (Hadis, 2005). Future research might look for comparison samples in non-experiential courses focused on internationalization. Though these types of courses and curriculum are still in their infancy, they may provide a like minded comparison sample.

Recommendations

These findings lead us to believe transformative learning can act as both an outcome and a model for change in study abroad settings. In other words, the transformative learning model may serve as a meaningful guide to assist study abroad programmers in their attempts to influence student values and international perspectives. Ultimately these findings justify financial and temporal investment in study abroad programming and provide some practical

ideas for improving internal study abroad efforts. Efforts to more intentionally steer study abroad towards perspective transformation could match program activities to the phases of transformative learning. These activities could include "journaling, group debriefing, peer dialogue, silent reflection, and online blogging (Trilokekar & Kukar, 2011) or "case studies, role play, learning contracts, group projects, concept mapping, consciousness rising, and participation in social action" (Foronda & Belknap, 2012, p. 159). Future studies could explore the types of study abroad activities that influence the phases of transformation and how these activities can be enacted more fully.

Despite these promising findings, the superficial nature of a business study abroad program and limited depth of experience may be less disorienting than the long term, immersion experienced by ESL and international students. It is possible if we had evaluated semester long study abroad programs that were more immersive in nature and therefore more akin to the ESL experience, we would have seen even higher reports of perspective transformation. Future research using the transformative learning framework should compare the effect of study abroad duration and level of immersion on perspective transformation, specifically comparing short and long term study abroad programs (Dwyer, 2004).

Additionally, this study confirms the use of King's (2009) Learning Activity Survey to measure transformative learning in the context of study abroad. Future research of study abroad programming and outcomes should consider using appropriate adaptations of this tool. Further research might also explore differences based on pedagogical or departmental values (humanities v. business) or administration (programmed perspective transformation activities v. non-programmed activities). Lastly, this study was limited by a small and homogenous sample.

Future studies should explore a larger and more diverse population and test these affects across universities and programs.

In sum, this study confirmed short term study abroad programs may serve as a context for transformative learning processes to occur and targeted outcomes to be realized. Additionally, this study provided preliminary evidence that study abroad outcomes can be influenced by transformative learning processes. These findings provide program planners with a theoretical framework and evidence based research to support and adapt their programming efforts. These findings can also act as a catalyst for research confirming study abroad as a meaningful learning activity, providing a return on investment to students, parents, universities and other funding sources.

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Tables

Table 1

Demographic Characteristics of Survey Respondents

Variable	*N=107*	*%*
Gender		
Male	39	63.6
Female	68	36.4
Total		100.0
Race		
White	94	87.9
Hispanic	5	4.7
Asian	7	6.5
NA	1	0.9
Total		100.0
Marital Status		
Single	78	72.9
Married	26	26.2
Other	1	0.9
Total		100.0
Age		
19 years and under	3	2.8
20-24	75	70.1
25-29	20	18.7
30-34	4	3.7
35 years and older	5	4.7
Total		100.0
Number of Semesters Completed		
1-2	4	6.6
3-4	14	13.1
5-6	28	26.2
7-8	18	16.8
9+	27	25.2
NA	13	12.1
Total		100.00

Note.

Table 2

Comparison of Perspective Transformation Means between Related Studies

Study Sample	n	Reported Perspective Transformation	Program Length
Study Abroad Participants	107	58.0%	2-6 Weeks
ESL Students	208	66.7%	16+ Weeks
Adult Educators (2004)	58	62.0%	16+ Weeks
International Graduate Students	560	61.7%	16+ Weeks
Undergraduate Business Students	256	48.8%	16+ Weeks
Pilot Study	367	37.3%	16+ Weeks
Adult Learners in Higher Ed	422	32.5%	16+ Weeks

Note. Undergraduate business students most closely match our population on relevant demographic variables.

Table 3

Relation between Reported Perspective Transformation and the Sum of Phases

Variable	$\bar{X}$ No. of Phases	SD	$\bar{X}$ Difference	Levene's Test Sig.	t	ρ
Perspective Transformation						
Yes	5.10	1.917	3.786	.011	-8.026	.000*
No	1.31	2.708				

*Note. *p< .001*

Table 4

Summary of Blocked Regression Equations: Sum of Transformative Learning Phases

Variable	B	SEB	ρ
Perspective Transformation (n=107)			
Block 1 R² = .029 (ρ = .788)			
Prior Travel Experience	.199	.486	.682
Prior Mission Experience	.311	.453	.492
Motivation Academic	-.372	.487	.445
Motivation Recreation	.641	.541	.236
Motivation Career	-.145	..489	.767
Prior Language Experience	-.487	.466	.296
Block 2 ΔR² = .389 (ρ < .000)			
Prior Travel Experience	.107	.724	.139
Prior Mission Experience	.208	.646	.747
Motivation Academic	-.396	.623	.525
Motivation Recreation	-.563	.688	.413
Motivation Career	-.553	.688	.421
Prior Language Experience	-.906	.661	.171
Sum of Phases	.805	.158	.000*

*Note. *p< .001. Despite its non-significance, model one includes predictor variables identified and supported in the literature.*

Table 5

Frequency of Transformative Learning Phases and Correlations

Variable	*%*	*SD*	*Chi*	*ρ*
Perspective transformation (n=107)				
Disorienting Dilemma A	69.4	.501	30.318	.000**
Disorienting Dilemma B	56.5	.488	20.511	.000**
Self-Exploration A	38.7	.419	22.456	.000**
Self-Exploration B	35.5	.471	.515	.307
Recognized discontent shared	30.6	.413	7.314	.006*
Explored New Roles	56.5	.484	25.465	.000**
Assessed Assumptions	9.7	.264	1.032	.265
Acquired Knowledge	53.2	.481	20.194	.000**
Built Competence/Confidence	43.5	.456	15.211	.000**
Planned Course of Action	33.9	.431	7.343	.005*
Tried on New Roles	40.3	.460	7.630	.006*
Reintegrated to Life	41.9	.442	18.970	.000**

*Note. *p< .05; **p< .001*

Table 6

Differences Between Pre and Post Travel Outcome Measures

Variable	*M*	*SD*	*t*	ρ
Travel Efficacy				
Pre	3.7853	.87012		
Post	4.5912	.46069		
Difference	.82051	.77574	10.787	.000*
Intercultural Competence				
Pre	3.946	.74900		
Post	4.4533	.45257		
Difference	.50588	.626611	8.154	.000*
Intentions				
Pre	2.2924	.9362		
Post	3.1880	1.0029		
Difference	.2900	.5482	5.290	.000*

Note. *p< .05; **p< .001

Table 7

Summary of Blocked Regression Equations: Change in Intercultural Competence

Variable	B	SEB	β	ρ
Change in Intercultural Competence (n=107)				
Block 1 R² = .164 (ρ=.008)				
Prior Travel Experience	-.376	.142	-.259	.010**
Prior Mission Experience	.057	.132	.045	.668
Motivation Academic	-.325	.140	-.221	.022*
Motivation Recreation	.345	.160	.210	.034*
Motivation Career	.082	.144	.059	.570
Prior Language Experience	-.018	.139	-.013	.897
Block 2 ΔR² = .061 (ρ=.008)				
Prior Travel Experience	-.378	.138	-.260	.007**
Prior Mission Experience	.025	.128	.020	.847
Motivation Academic	-.281	.136	-.191	.042*
Motivation Recreation	.287	.156	.175	.070
Motivation Career	.100	.139	.072	.475
Prior Language Experience	.030	.136	.021	.826
Perspective Transformation	.320	.118	.253	.008**

*Note. *p< .05; **p< .01*

Appendix A: Prospectus

Study Abroad as a Transformative Experience: Measuring Transformative Learning

Phases and Outcomes

Introduction

Through the last two decades institutions of higher education have progressively added internationalization to their academic agendas (Altbach & Knight, 2007; Jones, Rowan-Kenyon, Ireland, Niehaus, & Skendall, 2012). Internationalization refers to "any systematic, sustained effort aimed at making higher education [more] responsive to the requirements and challenges related to the globalization of societies, economies, and labor markets" (Van der Wende, 1997, p. 53). According to Bamber and Hankin (2011), "[these] shifts [towards internationalization] are said to be occurring in higher education pedagogy, where efforts are being made to expand the social, cultural, and human capital of universities and their local communities through experiential learning and active partnership" (p. 190). Purposive or educative recreation programs such as study abroad have become a standard tool for achieving the goal of internationalization via the learning experiences they provide (Altbach & Knight, 2007). Findings indicate study abroad participation correlates with meaningful learning through exposure to novel geographies, cultures, and worldviews (Trilokekar & Kukar, 2011).

Although the motivation for internationalization in higher education is clear, colleges and universities have made insufficient progress towards verifying that international program objectives and outcomes are being met. The National Association for Foreign Student Advisers (NAFSA) (2011) published the results of a public survey which reported "nearly three-fourths of [the 1000] respondents surveyed believe that America's higher education institutions must do a better job of teaching students about the world if they are to be prepared to compete in the global economy" (p. 2). Altbach and Knight (2007) buttress these findings, calling for improved quality assurance measures in internationalization. These two studies reinforce a need to reexamine the relationship between study abroad program activities and outcomes.

In response to this need scholars have endeavored to empirically demonstrate whether international programs like study abroad, do in fact provide unique and impactful opportunities for learning about the world (Foronda & Belknap, 2012; Ritz, 2011). Some researchers have recently turned to John Mezirow's transformative learning theory in an attempt to understand and explain the educative potential of study abroad (Hutchison & Rea, 2011; Ogden, 2010: Trilokekar & Kukar, 2011). All three studies found perspective transformation and resultantly meaningful learning can occur in study abroad settings. Wanting in transformative learning literature is quantitative support for these claims (Cheney 2010; Taylor, 2007). This thesis proposal seeks to quantitatively verify Mezirow's transformative learning theory as a model to explain the scholastic value of study abroad.

Statement of Problem

The problem of this study is to quantitatively test a model of transformative learning in the context of study abroad. Specifically this study will investigate: (a) whether study abroad participants report perspective transformation (PT) comparable to literature benchmarks (b) whether there is a relationship between the sum of transformative learning phases experienced and reported PT for individual students and (c) whether there is a relationship between reported PT and specific study abroad outcomes, namely intercultural competence, travel efficacy, and intentions to engage in international education and employment.

Purpose of the Study

The purpose of this study is to enhance understanding of transformative learning by focusing on a specific study abroad context and link transformative learning phases to outcomes. Taylor (2007) suggested "there is less research about the possibility and process of transformative learning occurring in a particular context…and more research about the nature of

a learning experience and how it informs our understanding of transformative learning" (p. 176). In other words, research has clearly established and described the transformative learning process itself but has not adequately observed how it occurs and is adapted in non-traditional contexts.

Taylor (2007) continues stating transformative learning research calls for application or testing in more active, "direct," and "informal," settings, as in study abroad programs (p. 182). A small body of study abroad research found a positive correlation between participation in short term study abroad programs and the occurrence of transformative learning (Jones et al., 2012: Ritz, 2011); however, some researchers question whether or not these findings are legitimate and representative of actual transformations (Foronda & Belknap, 2012). Because the nature of the relationship between study abroad participation and transformative learning is still under scrutiny, the purpose of this study is to increase understanding about this relationship.

Furthermore, prior research on transformative learning theory has overwhelmingly been qualitative in nature (Cheney, 2010; Taylor, 2007). Though qualitative studies provide rich description and have done the majority of the legwork in transformative learning research, their findings are less conducive to generalizability and testability (Kember et al., 2000; Caruana, 2011). The proposed study, therefore, aims to provide clarification, support, and applicability of findings through the use of quantitative methods. Specifically, the study will use quantitative methods to test qualitative claims that transformative learning occurs in study abroad settings and influences study abroad outcomes (Chang, Chen, Huang, & Yuan, 2012; Ogden, 2010). Additionally, Brock (2010) suggested that the sum of transformative learning phases correlates with reported perspective transformation. The proposed study will aim to verify these findings in the context of study abroad.

Significance of the Study

The proposed study could prove to be important in two ways: first, by providing justification for sizeable investments in internationalization in higher education and second, by informing internal study abroad programming efforts.

A substantial amount of temporal, financial, and personnel resources are directed towards advertising, planning, and carrying out study abroad experiences. Parkinson (2007) described some of the demands associated with establishing study abroad programs; he listed scaling, recruitment, and assessment as just a few of the areas requiring additional investment on the part of institutions. Additional empirical evidence linking study abroad activities to outcomes is prerequisite in order to justify these investments. To verify this link, this study will determine if transformative learning is occurring in study abroad by comparing perspective transformation (PT) index scores between study abroad participants and benchmark scores outlined in the literature. Then, this study will investigate the relationship between PT and study abroad outcomes, like intercultural competence, by comparing intra group outcomes amongst those who reported PT and those who did not. If there is an association between reported perspective change and the outcomes achieved, then transformative learning theory may be used to effectively evaluate and meet study abroad outcomes, justifying program expenses.

An abundance of research identifies positive outcomes for students who participate in study abroad programs (Hutchison & Rea, 2011; Jones et al., 2012). An equally extant dearth of research connects study abroad outcomes to specific study abroad activities (Foronda & Belknap, 2012). This study would attempt to establish a platform from which future studies could establish the connection between study abroad processes and outcomes. Specifically, this study will explore the relationship between transformative learning and outcomes such as travel

efficacy, intercultural competence and intent to engage in international education and employment. Developing this relationship may inform study abroad facilitators as to what types of activities to promote or discourage in their programming efforts. If reported perspective transformation influence learning outcomes, program facilitators could intentionally include activities that promote transformative learning; e.g. journaling, debriefing, and planning. Reiterated, this study aims to inform study abroad policy and programming by clearly connecting perspective transformation to study abroad outcomes.

Hypotheses

H_{01}: Less than the established benchmark 66.7% of participants will report perspective transformation (PT).

H_{a1}: Approximately 66.7% or more participants will report perspective transformation.

H_{02}: The sum of transformative learning phases experienced will not relate to reports of perspective transformation.

H_{a2}: The sum of transformative learning phases experienced will significantly (α=0.05) relate to reports of perspective transformation.

H_{03}: There is no relationship between reported perspective transformation and identified study abroad outcomes (travel efficacy, intercultural competence, and intentions) among participants in a collegiate business related study abroad program.

H_{a3}: There is a statistically significant (α=0.05) positive relationship between reported perspective transformation and identified study abroad outcomes (travel efficacy, intercultural competence, and intentions) among participants in a collegiate business related study abroad program.

Delimitations

The scope of this study is delimited to the following:

1. One hundred and seven individuals, enrolled at Brigham Young University—Provo, Utah.

2. Student self reports of study abroad outcomes on multi item measures including retrospective pretest data.

3. The Learning Activities Survey originally intended for traditional, formal education settings.

4. Self-selected participants.

5. Operationalized definitions of transformative learning phases, study abroad outcomes, and transformative learning as an outcome.

6. Study conducted over the course of three months, between May 31, 2013 and August 31, 2013. This period accounts for both program participation and data collection.

7. Study abroad programs visiting the following locations: (a) Thailand, (b) mainland China, (c) the British Isles, and (d) Western Europe.

Limitations

The study is limited by the following factors:

1. A small, homogeneous sample (n=107), necessitating caution with data extrapolation and tempering the level of statistical analysis.

2. Data for this study will be drawn from multiple different study abroad programs.

3. The evaluation protocol employs a post trip, retrospective pretest method, relying on the individual's ability to recall attitudes and abilities from the past. This may bias or create error in responses.

4. The evaluation protocol employs a self report method relying on respondent integrity.

5. Study abroad activities and processes were not supervised or controlled by the researcher.

6. Individual study abroad programs were facilitated by different faculty members with diverse pedagogies.

7. Students may have had prior international experience which could make the study abroad experience less disorienting, thereby limiting the possibility of initiating the transformative learning process.

8. Variation in motivations for participation may affect the results of the study; i.e. vacation mindset may inhibit openness to transformation (Foronda & Belknap, 2012).

9. The length of the study abroad experience may vary between programs.

Definition of terms

1. Internationalization: Internationalization refers to "any systematic, sustained effort aimed at making higher education (more) responsive to the requirements and challenges related to the globalization of societies, economy, and labor markets" (Van der Wende, 1997, p. 53).

2. Short term study abroad: For the purposes of this study, short term study abroad is defined as a 2 to 6 week international, academic program led by a faculty facilitator.

3. Transformative learning: "Transformative learning refers to the process by which we transform our taken-for-granted frames of reference…to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs…that will guide to action" (D'Amato & Krasny, 2011, p. 239).

4. Transformative learning phases: Transformative learning occurs as a result of ten as phases: (a) experience a disorienting dilemma, (b) undergo self-examination,

(c) conduct a deep assessment of personal role assumptions and alienation created by new roles, (d) share and analyze personal discontent and similar experiences with others, (e) explore options for new ways of thinking, (f) build competence and self-confidence in new roles, (g) plan a course of action, (h) acquire knowledge and skills for action, (i) try new roles and assess feedback, and (j) reintegrate into society with a new perspective (Coghlan & Gooch, 2011, pp. 716-717).

5. Study abroad outcomes: This study will focus on three study abroad outcomes: (a) intercultural competence, defined as "the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes" (Deardorff, 2006, p. 33), (b) travel efficacy, defined here as one's beliefs about one's ability to plan for and engage in travel outside of one's community, and (c) intent to engage in international education or employment, defined here as intent to engage in coursework, travel, or employment related to international business and the pursuit of degrees, experience, or careers in that field.

6. Center for Global Management: Located in the Marriott School of Business at Brigham Young University. Partnered with the authors on this project and provided access to study abroad data.

Literature Review

The problem of this study is to quantitatively test a model of transformative learning in the context of study abroad. Specifically this study will investigate: (a) whether study abroad participants report perspective transformation (PT) comparable to literature benchmarks (b) whether there is a relationship between the sum of transformative learning phases experienced, and reported PT for individual students and (c) whether there is a relationship between reported PT and specific study abroad outcomes. In this chapter the literature regarding study abroad, transformative learning and their hypothesized relationship is reviewed. Literature regarding the methods used to evaluate and interpret transformative learning is also reviewed.

Study Abroad

In her study of university student participation in a study abroad program, Jackson (2008) stated "due to globalization the world has increasingly become interconnected," begging the question, "How can [institutions of higher education] better prepare their graduates to become global citizens and professionals?" (p. 349). In response to this problem, institutions of higher education are progressively incorporating international programming into their curricula (Altbach & Knight, 2007; Jackson, 2008). This change in core curriculum has resulted in a swelling demand for international programs, like study abroad, and an imminent need to understand their outcomes and processes (Brown, 2009; Bushell & Goto, 2011).

In response to these shifts and trends, many researchers have endeavored to empirically demonstrate that international programs do in fact meet unique, targeted outcomes (Foronda & Belknap, 2012; Jones et al., 2012). In Foronda and Belknap's (2012) review of the study abroad literature, outcomes such as "increasing cultural awareness, sensitivity, and competence" were identified (p. 1). Additional outcomes, such as "cognitive development and personal growth"

were also highlighted in this study (Foronda & Belknap, 2012, p. 1). Jones et al. (2012)

enumerated the following outcomes in their assessment of study abroad literature: "academic

gains, increased knowledge of…diversity, improved ability to work with others, leadership, etc."

(p. 202). Additional outcomes such as "flexibility and openness…cultural adaptability… [The]

improved ability to recognize and appreciate cultural differences…and increased interest in

learning about international affairs" were reported as well (p. 202). A recent amalgamation of

qualitative research has also endorsed transformative learning as a study abroad outcome. In

fact, Dubouloz et al. (2010) state that "for many, transformation can be thought of both as a

process and as an outcome," however, this hypothesis has not been quantitatively researched or

tested (p. 283). This study will attempt to examine the relationship between transformative

learning phases, reports of transformative learning, and study abroad outcomes.

Transformative Learning Theory

Transformative learning theory originated with John Mezirow and endeavors to elucidate

the adult learning process (Taylor, 2007). Mezirow (1978) first conceived the idea of

transformative learning in the mid 1970's as part of a descriptive study of women in academia.

The qualitative study aimed to determine how older women adjusted to university learning after

an extended period of absence. As a result of the study Mezirow identified and delineated 10

phases which appeared to describe the process of learning or perspective transformation for these

women (Kitchenham, 2008).

Mezirow's theory builds upon the preexistent theoretical models of Kuhn, Freire, and

Habermas (Cranton, 1994; Kitchenham 2008). According to Kitchenham (2008), Kuhn's work

on scientific revolutions influenced the development of transformative learning concepts, such as

meaning perspectives, habits of mind, and perspective transformation. Kuhn (1962) referred to

meaning perspectives as paradigms, or worldviews. These paradigms are comprised of two

characteristics, antecedents to Mezirow's ideas regarding perspective change (Kuhn, 1962;

Kitchenham, 2008); if they are to "attract…adherents," paradigms must be "simultaneously

unprecedented… [and] open-ended" (Kuhn, 1962, pp. 10-11). Clearly Mezirow utilized Kuhn's

ideas in his characterization of transformative learning as the development of a more "inclusive,

discriminating, [and] open" worldview (D'Amato & Krasny, 2011, p. 239).

Freire (1970) proposed a series of conscientious stages of growth. The stages are

comprised of (a) intransitive thought and (b) semi transitive thought, and culminate in (c) critical

transitivity. Mezirow's articulation of some of the phases of transformative learning, including

the disorienting dilemma and critical self-reflection phases, are directly correlated with these

three stages (Kitchenham, 2008). For example, intransitive thought is characterized by despair—

an individual feeling he lacks choice or control in the matter—and is akin to the confusion,

discomfort or disorientation described by Mezirow (Freire, 1970). In the semitranstive stage, the

individual begins to reflect on his circumstances and is highly influenced by his social context,

much like the reflective discourse that occurs in Mezirow's (1994) transformative learning

theory. Finally, in Freire's (1970) stages, the individual is able to develop a sense of control and

pursues a new course of action, as in the final phases of Mezirow's theory (Kitchenham, 2008).

Cranton (1994) suggests Mezirow's learning indictors are also heavily influenced by

Habermas' (1971) domains of learning. These domains include: (a) instrumental learning (task

oriented), (b) communicative learning (social), and (c) emancipatory learning (self-reflective)

(Cranton, 1994). From these spheres of learning, Mezirow further conceptualized meaning

perspectives, meaning schemas, and perspective transformation (Kitchenham, 2008). Mezirow

seemed especially intrigued by the emancipatory power of learning in which the learner is able to

recognize and shed old or debilitating assumptions in order to replace them with new assumptions that are more accepting and open (Kitchenham, 2008).

Mezirow (1996) defines transformative learning as "the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one's experience in order to guide future action" (p. 162). He theorized transformative learning occurs in four ways:

1. By elaborating existing frames of reference

2. By learning new frames of reference

3. By transforming points of view, or

4. By transforming habits of mind. (Kitchenham, 2008, p. 120)

He described a frame of reference or meaning perspective (used interchangeably) as a "filter" through which information passes and assumptions are formed (Mezirow, 2000, p. 16). This filter is composed of both habits of mind and points of view which he described as "orienting predispositions" expressed as "expectations, beliefs, feelings, attitudes and judgments" (Mezirow, 2000, pp. 17-18).

Mezirow (1985) additionally defined initial views of the world, or meaning perspectives, as "the structure of cultural and psychological assumptions within which our past experience assimilates and transforms new experiences" (p. 21). Essentially a meaning perspective is the sum total of past experience which makes up our current view of the world and influence the development of new views.

Mezirow (2000) also suggested meaning schemas change as a result of transformative learning. These schemas are defined by Mezirow (1994) as "the constellation of concept, belief, judgment, and feeling which shapes a particular interpretation" (p. 223) and by Cranton (1994) as "rules, roles, and expectations that govern the way we see, feel, and act" (p. 24). These

schemas then, are the lenses through which we view and interpret events in our lives. Accordingly, both our view of the world and the instrument through which we view the world are changed as a part of the transformative learning process.

In later works Mezirow expanded his definition of transformative learning to include the following characteristics:

> Transformative learning refers to the process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs…that will guide to action. (D'Amato & Krasny, 2011, p. 239)

O'Sullivan, cited in a study by Coghlan and Gooch (2011), expanded on Mezirow's demarcation stating transformative learning requires "a deep structural shift in the basic premises of thought, feelings and actions. It is a shift of consciousness that dramatically and irreversibly alters our way of being in the world" (p. 716). Consequently, he continued, "the individual undergoing change becomes conscious of him or herself as situated within larger political, economic, sociocultural and spiritual forces" (Coghlan & Gooch, 2011, 716). In sum, transformation is ignited as one experiences a paradigmatic shift in thinking and culminates in action guided by a newly developed worldview.

From these definitions and assumptions, the 10 phases of transformative learning were established. These phases are constituted by: (a) experiencing a disorienting dilemma, (b) undergoing self-examination, (c) conducting a deep assessment of personal role assumptions and alienation created by new roles, (d) sharing and analyzing personal discontent and similar experiences with others, (e) exploring options for new ways of thinking, (f) building

competence and self-confidence in new roles, (g) planning a course of action, (h) acquiring knowledge and skills for action, (i) trying new roles and assess feedback, and (j) reintegrating into society with a new perspective (Coghlan & Gooch, 2011, pp. 716-717).

      Phases of transformation. As in other theories of learning and behavioral change, transformative learning is signaled by a "trigger event—an unexpected event that leads to discomfort or perplexity in the learner" (Cranton, 1994, p. 71). Mezirow (1991) christened this event a *disorienting dilemma* [emphasis added]*,* "an internal or external conflict," (p. 143) or a process in which individuals recognize and pursue something that is missing from their lives (Coghlan & Gooch, 2011, p. 719). Yeboah (2012) called it "a life event or incident that a person experiences as a crisis that cannot be resolved by applying previous problem-solving strategies" (p. 20). Typically individuals experiencing a disorienting dilemma feel a sense of "dissonance" or "conflict" as they are introduced to new or divergent values, opinions, or beliefs (Grand, 2011, p. 252).

      In response to this dilemma "the learner sees a discrepancy between expectations and experience" (Cranton, 1994, p. 71). There is "an appraisal, which is *self-examination* [emphasis added] or identification, and clarification of the concern. The individual asks, 'what is going on here?'" (Cranton, 1994, p. 69). This process is often accompanied by unpleasant or undesirable emotions that lead to a critical *assessment of assumptions* [emphasis added] (Mezirow, 1991), wherein the learner "examines the sources of the assumptions… [and] the consequences of holding them" (Cranton, 1994, p. 83). This period of examination is usually "accompanied by some sense of alienation from his or her usual social context" (Cranton, 1994, p. 79).

      Following the period of self-assessment and sense of alienation the learner begins to participate in social discourse, seeking "to validate beliefs, intentions, values and feelings"

(Mezirow, 1998, p. 197). This is generally described as "a collaborative, open-ended activity that produces insights and confidence" (Cranton, 1994, p. 71). As part of this process the "person tries to explain discrepancies found in the appraisal phase or investigates new ways of thinking or behaving. The individual is open to new ideas and is searching for new ways of doing things" and begins to ask questions like "How do I know this? How do I validate this? How do others think?" (Cranton, 1994, p. 70). He or she engages in a "process in which [he has] an active dialogue with others to better understand the meaning of an experience. It may include interaction within a group or between two persons, including a reader and an author or a viewer and an artist" (Mezirow, 2000, p. 14).

According to transformative learning theory: "rational discourse," the process of *sharing and exploring* [emphasis added] is a means for testing the validity of one's construction of meaning. It is the essential medium through which transformation is promoted and developed (Brown, 2005, p. 157). Furthermore:

> Rational discourse involves a commitment to extended and repeated conversations that evolve over time into a culture of careful listening and cautious openness to new perspectives, not shared understanding in the sense of consensus, but rather deeper and richer understandings of our own biases as well as where our colleagues are coming from on particular issues and how each of us differently constructs those issues. (Brown, 2005, p. 157).

Through engaging in discourse, exploring, sharing, and reflecting, students construct plans and gain "*knowledge and skills* [emphasis added] for implementing one's plans" (Mezirow, 2000, p. 22). The student discovers or adheres to a new belief system and "these new beliefs, skills and competencies guide future action. This includes *trying out new ways of thinking or acting*"

[emphasis added] (Mezirow, 2000, p. 22) which can instill in the individual the "*self-confidence* [emphasis added] needed to integrate the new perspective" (Baumgartner, 2002, p. 45). After engaging in this learning process, "the learner may now choose to retain his original beliefs or modify them slightly to fit a new situation" (Mezirow, 2000, p. 22). To modify our beliefs and *pursue a new course of action* [emphasis added] is manifest in the act of "making a decision, not necessarily an immediate behavior change" (Mezirow, 1994, p. 226). The change in perspective correlates with the "learner's motivat[ion] to take collective social action to change social practices, institutions, or systems" (Mezirow, 1994, p. 226).

In order for learning to be truly transformative it needs to persist beyond the learning experience and be *integrated* [emphasis added] into an individual's life (Bamber & Hankin, 2011). Brookfield (1987) described the incidence of reintegration: "Having decided on the worth, accuracy, and validity of new ways of thinking or living, we begin to find ways to integrate these into the fabric of our lives" (p. 2). Cranton (1994) continued, saying "the learner comes to a sense of closure; there may be visible actions or the process may be internal" (p. 70). Finally, Dubouloz et al. (2010) state, "In this phase, a person identifies and experiences the outcomes of the transformative process…participants [have] a more broadened view of the world" (p. 290).

Kitchenham (2008) suggested the phases do not have to be experienced sequentially or in their entirety; however, Brock (2010) discovered the more phases an individual reported experiencing, the more likely they were to report perspective transformation. Furthermore, though nature of these phases has been studied in detail, measurement of their impact on transformative learning and study abroad program outcomes has been lacking.

Measuring Transformative Learning

"The conceptualization of [transformative learning] and the identification of its elements and attributes remain elusive" (Dubouloz et al., 2010, p.283). Cheney (2010) proposes this is due to the nature of transformative learning—it being abstract and hard to conceptualize. In an in depth analysis of transformative learning literature, Cheney (2010) reviewed over 50 empirical studies of perspective transformation noting some 15 % used quantitative or mixed methods. In her review she identified two approaches to quantitatively measuring transformative learning. The first method required pre and posttest measurement of a key characteristic or attribute. Transformative learning was said to have occurred if there were significant gains in the characteristic or attribute. The second, less common method was characterized by attempts to conceptualize and operationalize actual transformative learning phases and outcomes.

This approach came in response to a "growing body of research highlight[ing] the need for a conceptual integration of results to develop a framework that could shed light on the influence of context on transformation" (Dubouloz et al., 2010, p. 283). In support of Dubouloz et al.'s (2010) statement, Taylor (2007) stated the following:

> Scales and surveys offer valid tools to identify individuals who have experienced a change in perspective about a particular phenomenon. These instruments help address the need for research designs that involve the selection of participants based on criteria characteristic of transformative learning theory and could potentially lead to greater reliability in the identification of essential components (e.g. critical reflection, perspective transformation). (p. 177)

At the turn of the century, two promising lines of research emerged proposing operationalized definitions of transformative learning constructs (Kember et al., 2000; King, 1997). The more

comprehensive approach to transformative learning theory measurement came from King's (1997) Learning Activities Survey (LAS).

The original LAS was developed in 1997 and builds upon the work of Mezirow (1978), Cranton (1994), Brookfield (1987) and others. The instrument was comprised of four parts determining the extent to which individuals experienced transformation and the types of activities that influenced transformative learning (King, 2009). Ten interviews, ten pilot studies, and a panel review of the instrument were conducted to establish its validity and reliability (King, 2009). The original study collected usable data from 367 students continuing in higher education. Of these individuals, approximately 37% reported experiencing transformative learning related to their educational activities (King, 2009). The survey enabled King to determine if transformative learning was occurring and how, information that could benefit future curriculum development and that would direct future research of transformative learning. In fact King (1997) urged researchers to test her findings, specifically in "other settings and among different populations" (King, 2009, p. 58).

Following King's initial study a line of research developed, most notably including studies from King (2000-2004), Brock (2010-2012), and Yeboah (2012). The first of King's subsequent studies used a transformative learning framework to assess the needs and outcomes of ESL students and determine how educators could better serve this population in terms of literacy and identity development (King, 2000). The researcher employed the LAS and a modest number of follow up interviews (n=24) and found approximately 67% of ESL students reported transformative learning. Perspectives changed regarding the language, the perceived difficulty of learning the language, and the development of intercultural competence (King, 2000).

In 2002, King conducted another study using the LAS. This study focused on how educators' attempts to incorporate technology into their classroom instruction were grounds for transformative learning to occur. Specifically at described how transformative learning activities can improve and inform teacher training and resultantly affect teaching in the classroom. King found teachers experienced a change in their perspective described as "empowerment" or a new belief in their ability to integrate technology into the classroom (King, 2002, p. 293). Two years later King conducted a similar study in which she evaluated the perspective change experienced by adult educators who participated in a professional development class (King, 2004). In this study approximately 62% of the participants reported transformative learning oriented towards increased open mindedness and the ability to see their students and peer educators in a new light.

Other researchers have also reported successful use of the LAS (Brock, 2010; Yeboah, 2012). Brock (2010) used the LAS to determine how transformative learning precursors, Mezirow's ten phases, influenced overall perspective transformation for 256 undergraduate business school students. Using logistical regression and chi-square testing, she was able to determine the "more steps respondents remembered experiencing, the more they also reported transformative learning" (Brock, 2010, p. 122). This study also highlighted the importance of disorientation, reflection, and the testing of new roles as key precursors to transformative learning. Building on this study, Brock, Florescu, and Teran (2012) published a research article suggesting "transformative learning may help undergraduate students adjust more readily to a fast changing workplace" (p.1). The findings in this study again supported the occurrence of transformative learning and linked this outcome to the incidence of transformative learning precursors.

Yeboah (2012) published the results of a study supporting Brock's 2010 and 2012 findings. Using similar methods and analysis, he proposed that transformative learning also occurred for and could benefit international students. He recommends educators use a transformative learning framework to facilitate the cultural transition for international students based on reports from the LAS (Yeboah, 2012). As shown here, the LAS has been used to successfully identify and measure the incidence of transformative learning, however, these studies only test the transformative learning model in formal education settings. Additional application in diverse settings, as proposed by King (1997), is crucial to the development of the theory.

Contexts for Transformative Learning

Since its origins, transformative learning theory has been studied with a variety of different populations and in a multiplicity of contexts (Taylor, 2007). The theory, predominately applied in formal education settings, has also been used as a framework in a series' of studies of chronic illness (Baumgartner, 2002; Courtenay, Merriam, & Reeves, 1998; Courtenay, Merriam, Reeves, & Baumgartner, 2000; Dubouloz et al., 2010; Kessler, Dubouloz, Urbanowski & Egan, 2009), studies of diabetes (Ntiri & Stewart, 2009; Paterson, Thorne, Crawford, & Tarko, 1999) a study of women offenders and their parenting role (Norell, 2012), and studies of participant change in experiential education (Coughlan & Gooch, 2011; D'Amato & Krasny, 2010). Qualitative studies have also attempted to explicate transformative learning as it occurs in international study programs (Brown, 2009; Hutchison & Rea, 2011; Trilokekar & Kukar, 2011; Ritz, 2011).

In 1998 Courtenay et al. began a series of studies aimed towards understanding how HIV-positive adults make meaning of their lives. Using a transformative learning framework

and qualitative design these authors found that when individuals are diagnosed with a chronic illness they experience substantial disorientation, but are able to cope and respond positively through transformative processes such as: considering other options, engaging in dialogue with family or support systems, and becoming altruistically and actively involved in issues and programs related to their illness (Courtenay et al., 1998). In the two and four year follow up studies the authors found "the perspective transformation proved irreversible. People continued to appreciate their lives and the lives of others; furthermore, they maintained the more integrated, inclusive, and discriminating perspective they had attained earlier" (Baumgartner, 2002: Courtenay et al., 2000, p. 109).

Years later, Kessler et al. (2009) found individuals who had experienced a stroke were "unable to participate in their lives as they had done prior" and were forced to revise their meaning perspectives (p. 1058). In a follow up study, Dubouloz et al. (2010) identified three stages of transformation experienced by victims of stroke: "initial response, embracing the challenging, and integrating new ways of being" (p. 291). Those who went through this transformative process were more likely to respond to their limitations positively (Dubouloz et al., 2010).

In a similar vein of research Paterson et al. (1999) described how individuals with diabetes became more self-determined as a result of transformative learning. These individuals reported this transformation as the process of "'discovering that I could control my diabetes. It didn't have to control me.' Transformation resulted in significant changes in participant's values, beliefs and assumptions and/or practices in living with diabetes" (p. 792). Exactly a decade later, Ntiri and Stewart (2009) published a study promoting the use of transformative learning in health education interventions for individuals with diabetes. They found those who went through a

transformative learning intervention were more likely to be motivated to seek out the skills and knowledge required to manage their illness independently (Ntiri & Stewart, 2009).

In a more recent study, Norell (2012) described how a "4-H LIFE program provided an impetus for women offenders to find an alternative path or vision for their lives as they explored and tried on new roles as a leader in the program" (p. 241). These women were able to see themselves in a new light, share experiences with peers, and try out new roles in their family. When compared to similar, non-participants, these women experienced greater efficacy in their family roles and improved family functioning (Norell, 2012).

Finally, two studies identified perspective transformation in the context of experiential education and service learning (Coghlan & Gooch, 2011; D'Amato & Krasny, 2010). Coghlan and Gooch (2011) used a transformative learning framework to legitimize and explain volunteer tourism activities. They summarized Mezirow's original phases into four phases: (a) disorienting dilemma, (b) reflection and dialogue, (c) self-actualization, and (d) trial and planning, suggesting program activities be designed to promote these phases (Coghlan & Gooch, 2011). D'Amato and Krasny (2010) used transformative learning theory to explain how youth in an outdoor wilderness program achieve specific program outcomes. The conglomerate of these studies help us understand how researchers have responded to Taylor's (2007) call for more research of transformative learning in varied contexts. With this in mind, a body of qualitative research has aimed to review transformative learning in the context of study abroad.

Transformation in the context of Study Abroad

It has been said "transformative learning theory provides a framework for understanding how 'lived experiences' provide a context for making meaning of the world" (Trilokekar & Kukar, 2011, p. 1141). Dubouloz et al. (2010) echoed Taylor's call "for more research on the

significant influence of context, and the varying nature of the catalyst of the transformation process" (p. 283). In response to this call, a variety of qualitative studies have described how international study settings serve as a unique context for transformative learning to occur (Brown, 2009; Chang et al., 2012; Hutchison & Rea, 2011; Ritz, 2011; Trilokekar & Kukar, 2011). These studies identify elements of study abroad and international service learning that either inhibit or promote transformation.

Blocks to transformation. In a one year follow up with study abroad participants Jones et al. (2011) found what takes place after the international experience can be just as vital as what takes place during. Students in this study reportedly fell into one of two groups: (a) those who felt they had truly changed; students who continued to travel and express concern for international issues and (b) those who felt the change was not as deep or long lasting as originally reported; students who allowed prior commitments, school deadlines, and other constraints to interfere with the final phase of transformation (Rowan-Kenyon et al., 2011). In either case, just as there are factors that promote transformative learning, there are also those that inhibit transformation.

In a study of 34 pre-nursing students' participation in a study abroad program, Foronda and Belknap (2012) determined three factors could potentially stop transformation from occurring: (a) Egocentrism/emotional disconnect, (b) perceived powerlessness/being overwhelmed, and (c) a vacation mindset. Emotional disconnect occurs when we put ourselves and our needs against those of others. We withdraw or build walls rather than expressing empathy or seeking to understanding another view, hindering our ability to change our perspective. Perceived powerlessness occurs when we have a desire to act but feel ill equipped or unable to do so. We may have experienced perspective change but it does not convert to

action. The vacation mindset is manifest in engagement in purely recreational travel; travel in which we do not immerse ourselves deeply enough in the culture to experience the disorientation needed to trigger transformation. In identifying these blocks, Foronda and Belknap (2012) promote reflective activities such as "debriefing, personal reflection, and problem solving groups" to prepare against emotional disconnect and other blocks (p. 13).

Another block occurs in study abroad experiences when the dilemma is too disorienting; in these situations individuals experience anxiety, withdrawal, and a sense of helplessness rather than changing perspectives and developing competence (Hutchison & Rea, 2011; Foronda & Belknap, 2012). On the other end of the spectrum, an experience that is not disorienting enough or that comes at the wrong time causes individuals to work within existing worldviews rather than adapt and adopt new, more inclusive ones (Fullerton, 2010).

In terms of experiencing transformative learning—duration matters—especially as it relates to the length of the study abroad experience (Dwyer, 2004). Although transformation can and does occur in short term study abroad (Ritz, 2011; Jones et al., 2012) research comparing yearlong sojourns to short term study abroad suggests longer is better (Foronda & Belknap, 2012). Dwyer (2004) found study abroad experiences influenced future engagement in international work, the development of useful career skills, and the desire to work overseas for participants regardless of the length of the trip; however, these findings were less significant for short term study abroad participants when compared to those who had stayed a full year. Foronda and Belknap (2012) found students perspectives had changed during their short term international stay, but their commitment to act and or change their habits had not. Ritz (2011) claimed transformation occurred when international study was included as a course component,

connected to normal institutional coursework and Jones et al. (2012) supported these claims, that meaning making can occur in short term study abroad settings.

 Factors promoting transformation. Ritz (2011) stated: "New experiences that contest held beliefs and promote acknowledgement of and reflection on these experiences are foundations for development of study abroad experiences that provide opportunities for transformative, emotional, and social learning to occur" (p. 168). In line with that thinking Brown (2009), reporting on a one year follow up with study abroad participants, indicated participants transformed their perspective of other cultures "as a result of exposure to diversity and of the geographical and emotional distance from the home environment" (p. 517). In another study, change occurred as students attempted to "relieve the stress and anxiety" of living in a place where values and lifestyles were different than their own (Brown, 2009, p. 508). Chang et al. (2012) found "different stimuli from new environments served as the triggers that led participants to recognize and reexamine their existing perspectives and mental frameworks" (p. 238). These triggers were said to have been both direct (new foods) and implicit (differing values, tempos, etc.). Additionally, studies identified culture shock and panic anxiety (Trilokekar & Kukar, 2011, p. 1142), "incongruity" (Ritz, 2011, p. 167), and feeling "outside [your] comfort zone" (Hutchison & Rea, 2011, p. 557) as common triggers to transformation in study abroad.

 Coghlan and Gooch (2011) describe how co-travelers provide a sounding board for reflection and discourse. In other words, the group design of most study abroad programs naturally lends itself to formal and informal exploration and sharing. The authors argue fellow participants in international service trips "play a role in questioning and challenging a learner" (Coghlan & Gooch, 2011, p. 721). Hutchison and Rea (2011) spoke of the importance of

coordinating daily meetings to allow participants to discuss and reflect on their experiences. These discussions can occur in a variety of different dyads or groups and in the case of study abroad might occur between fellow participants, a facilitator and participant, or a member of the destination community (Mezirow, 2000, p. 14). Hutchison and Rea (2011) postulate these discussions will produce outcome related change when oriented to the purposes of the study abroad.

Trilokekar and Kukar (2011) reported study abroad participants were likely to try out and test their new roles and beliefs because they had a new peer group and community in which to do so—a clean slate so to speak. The authors specifically described how "being an outsider in their host society and being away from home enabled more risk taking behavior, an opportunity to experience a new or different identity" (p. 1146). Chang et al. (2012) supported these findings suggesting a new location and culture is the prime place to explore, try and test an evolving identity.

Study abroad research, like traditional transformative learning research, states transformation is not really complete until new worldviews have been integrated into the individual's life (Coughlan & Gooch, 2011). Interestingly, reported intentions to act or reintegrate worldviews were heavily influenced by the study abroad experience and are predictive of long term transformative learning (Hutchison and Rea, 2011). As evidenced in these qualitative studies, transformative learning appears to be occurring in study abroad settings and influencing study abroad outcomes. Subsequent research should provide additional quantitative analysis and support of these claims.

Summary

The theory of transformative learning calls for research in novel, experiential settings and recommends application in varied medium. There exists a definitive need to explore other settings, particularly where the teaching contexts are more informal, less controlled by the instructor, and more susceptible to external influences (Taylor, 2007). Study abroad as a context for learning provides direct and meaningful learning experiences and many institutions are encouraging this type of educative experience for their students (Hutchison & Rea, 2011; Jones et al., 2012). This trend comes in response to globalization and efforts to make students more globally aware and adept (Altbach & Knight, 2007). Transformative learning theory may enhance our understanding or explain how and why international experiences generate desired outcomes. This study will respond to the call for a quantitative conceptualization of Mezirow's theory of transformative learning and quantitative evidence to support the existence of perspective transformation in an experiential context like study abroad. The study will also explore the relationship between transformative learning phases and targeted study abroad outcomes.

Methods

The problem of this study is to quantitatively test a model of transformative learning in the context of study abroad. Specifically this study will investigate: whether study abroad participants report perspective transformation (PT) comparable to literature benchmarks, whether there is a relationship between the sum of transformative learning phases experienced and reported PT for individual students, and whether there is a relationship between reported PT and specific study abroad outcomes.. This chapter outlines: (a) the research design, (b) the arrangements for conducting the study, (c) the selection of subjects, (d) procedures for gathering data, (e) instrumentation and (f) analysis.

Research Design

Prior research linking transformative learning theory to study abroad outcomes has primarily been qualitative in nature (Cheney, 2010). Taylor (2007) called for diversification in methods used to observe and test the occurrence and influence of transformative learning. Quantitative research is the process of "explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics)" (Muijs, 2004, p. 1). The epistemological foundations of quantitative research, decidedly different from their qualitative counterparts, are often described as being positivistic in nature (Muijs, 2004). The positivistic attributes of quantitative research presume there is an existing reality that can be revealed using precise instrumentation and minimal investigator involvement. According to Muijs (2004) quantitative research design allows researchers to evaluate phenomena that do not typically occur in numerical form such as attitudes or beliefs—abstract phenomena like transformative learning. The quantitative methodology and the type of analysis it affords will

enrich our examination of the relationship between transformative learning phases and study abroad outcomes.

Arrangements for Conducting the Study

Data for this study will be taken from internal program evaluations conducted by the Center for Global Management (the Center) at Brigham Young University (BYU). The Center is an independent organization operating within the Marriott School of Management that provides international work and study experiences for BYU students. The Center aims to prepare undergraduate and graduate students for employment in international organizations, both domestic and abroad, by promoting intercultural competence, travel and language efficacy, and business oriented skills. This study will specifically focus on study abroad programs, though the Center offers other types of international programming.

Each study abroad program consists of an informational preparatory course and a 2 to 6 week international stay, consisting of 10-20 business visits. In the introductory course, students attend between 8 and 10 classes, approximately two hours in length, informing students of the host country(s) their group will be visiting. Some of the groups' programs are directly correlated with a specific discipline (e.g. marketing or accounting); under these conditions, students engage in preparatory assignments related to these fields.

Each study abroad group (n=6) is comprised of a faculty supervisor and his/her family, an assistant facilitator (usually a student), and students. The study abroad program is primarily planned and implemented by faculty, student facilitators and international business correspondents. During the study abroad experience students network with local business leaders, conduct case studies of organizations, and engage in cultural and recreational activities. Study locations include parts of Asia and major cities and countries in Western Europe.

After repeated meetings with the directors of the Center for Global Management, a logic model was developed outlining key short, intermediate, and long term outcomes for study abroad participants. A logic model enables one to pictorially portray links between program inputs, outputs, and resources (causes) and program outcomes (effects) (Rossi, 2003). Program evaluators typically use logic models to establish performance measures (Rossi, 2003). A simplified version of the Center for Global Management's logic model has been included in figure 1 below:

	Short Term	Intermediate	Long (Pre grad)	Long (Post grad)
Inputs, Activities, and Outputs	Language Efficacy Travel Efficacy Intercultural Competence Intentions Leadership Communication Perceived competence in field of study Perceived Competence in international business	Foreign Language Cert Continued Language Study Continued international travel Continued international work experience Continued contact with international partners International business coursework International Internship or employment	Global management certificate Minor in international business	International career or domestic career with global focus
Figure 1: The Center for Global Management logic model. This figure illustrates the targeted short, intermediate, and long term outcomes for the Center.				

Though all of the efficacy and competency measures outlined in the logic model may correlate with transformative learning phases and outcomes, we have narrowed the scope of this study to investigate three of the those outcomes: (a) travel efficacy, (b) intercultural competence, and (c) intentions to pursue future, internationally oriented education and employment. Study abroad and transformative learning literature make reference to the prevalence of these outcomes though in different terms (Foronda & Belknap, 2012; Jones et al., 2012). For example, intercultural

competence (see figure 1 above) is synonymous with the concepts of cultural sensitivity, cultural awareness, and cultural adaptability proposed in the two cited studies.

Selection of Subjects

All of the participants are volunteers and are enrolled either part or full time at Brigham Young University. The main criteria for participation includes: (a) part or fulltime enrollment at a university, (b) agreement to abide by BYU's honor code, and in some instances (c) prior acceptance into a specific Marriott School program. Facilitators leading each group interviewed and selected participants from a larger body of applicants and may have had varying exclusionary or selective criteria.

Data for this study will be collected from individuals (n=107) who will travel with the Center for Global Management during the spring and summer terms of 2013. Members from each of the study abroad groups (n=6) will be invited to participate in the evaluation. The subject population consists of 67 males and 64 females. Eighty-six percent of the population is Caucasian, seven percent Asian, three percent Hispanic, and the remaining five percent did not report ethnicity on their application. Seventy-seven percent of the participants come from business related disciplines (e.g. accounting or management) while the remaining 23 percent come from a variety of other fields including: public relations, communications, civil engineering, biology and international studies. Participants range in age from 18 years to 34 years, with an average age of 24 years.

Data will also be collected from prior study abroad participants. Collecting this data will enable the researchers to do the following: (a) increase the sample size of the study, (b) verify the permanence of transformation, and (c) compare averages between current and past study abroad cohorts.

Procedures for Gathering Data

Permission was obtained from the directors of the Center for Global Management to use data collected from individuals enrolled in their summer 2013 study abroad programs and years prior. Additionally, consent from the individuals will be obtained using a standardized implied consent form (see appendix B). The investigator engaged in dialogue with the directors to develop a logic model and acquired instruments to measure outcomes identified in the model. In subsequent correspondence, adaptations were made to the overall instrument to ensure face validity or alignment with the model. The theoretical framework (transformative learning theory) and associated measures were also presented to and approved by the directors of the Center.

The instrument will be distributed and data collected by the Center for Global Management. The Center will employ a web based survey method, emailing each individual a letter of implied consent and a link to the questionnaire (see appendix B). Brock (2010) conducted a pilot test and found the web based survey had results analogous to the paper test. To ensure confidentiality, identification numbers will be assigned to each student, separating respondent names from respondent data. The Center will use the same email list to request volunteers for brief follow up interviews. Interested parties will indicate written consent on the web based survey and verbal consent when contacted via phone for participation in this part of the study.

Retrospective pretest. In a section of the questionnaire, students will complete self report, retrospective pretest measures assessing intercultural competence, travel efficacy, and intentions to engage in international education and employment. Retrospective pretest measures function to allow a "respondent to reflect back to a previous time (usually pre program) and

indicate his or her current perception of the level of an attribute he or she possessed at that previous time" (Sibthorp, Paisley, Gookin, & Ward, 2007, p. 297). These methods are typically used to respond to problems with pre and posttest measures, specifically self report bias derived from evolving internal metrics (Sibthorp et al., 2007). Jackson (2008), reported using a pre and posttest measure to evaluate changes in intercultural sensitivity for study abroad participants. She found respondents held "inflated perceptions of their level of intercultural sensitivity", sometimes many levels beyond what their actual sensitivity score revealed (Jackson, 2008, p. 349). Moore and Tananis (2009), in a study of short term educational programs, found respondents were consistently "overestimating their initial levels of competency" (p. 198). In contrast, the retrospective pretest approach assumes respondents will be better equipped to "define and understand the construct being measured and will be applying the same metric as they assess both pre and post program levels of an attribute" (Sibthorp et al., 2007, p. 297).

Though the retrospective pretest seems to address the issue of metrics and self report bias, it has its limitations as well. Sibthorp et al. (2007) suggest self report measures of any kind rely on respondent integrity and may be subject to testing affects. In other words, respondents may recognize the intent of the questions being asked and give fabricated responses to make themselves appear to have experienced higher levels of change in attitudes or a given attribute. The recall effect is an additional problem associated with retrospective pretest and is manifest in one's inability to accurately recall a prior state or ones assumption that a prior state must have been different than his or her current state (Moore & Tananis, 2009; Sibthorp et al., 2007).

On a final note, Sibthorp et al. (2007) suggests some constructs and contexts are more susceptible to response shift bias than others. The social nature of study abroad and the

attributes of transformative learning theory exacerbate this effect; therefore, to mitigate the effect of response shift bias, this study will employ a retrospective pretest approach.

Instrumentation

The variables of interest in this study are transformative learning, transformative learning phases, travel efficacy, intercultural competence, and intentions to engage in international education or employment. The Learning Activities Survey (LAS) (see appendix C) will be used to measure transformative learning and transformative learning phases (King, 2009). Internal standards developed for the Global Explorers (GEx) organization will be used to measure travel efficacy and intercultural competence will be measured using the Off Bound Adventures (2013) cultural awareness survey (CAS) (see appendix D). Intentions to engage in international education or employment will be measured with seven intention items designed specifically for this study (see appendix D).

Learning Activities Survey (LAS). Transformative learning and transformative learning phases will be measured using an adapted form of the Learning Activities Survey (LAS) (King, 1998). Adaptations will be limited to changes in terminology related to the context and will not alter the meaning of questions; for example, the term class will be replaced with the phrase study abroad program. The LAS was designed to determine whether individuals "had a perspective transformation in relation to their educational experience; and if so…what learning activities contributed to it" (King, 2009, p. 14). The original LAS was developed in 1997 and builds upon the work of Mezirow (1978), Cranton (1994), Brookfield (1987), and others. The survey is made up of four parts with a total of 14 questions (King, 2009). In part one respondents report the number and type of transformative learning phases they experienced using a check-box method. In part two they report whether or not they experienced transformative learning and describe how

this occurred in a brief free response format. In part three respondents indicate which types of

learning activities they experienced using a check-box method and in part four, they fill out the

remaining demographic questions. These demographic questions act as control variables and

assist in describing the population. As required by King (2009), the author of the survey, a small

selection of follow up interviews will be collected to check results and interpretation.

This study will also test a set of questions measuring the magnitude of perspective

change. These questions will ask about the level of disorientation, and the level of perspective

change and will be scaled from 0 to 100.

Reliability and Validity. The LAS is a comprehensive, albeit simple measure of

transformative learning and in recent years it has been well utilized and established. Ten

interviews, 10 pilot studies, and a panel review of the instrument were conducted after its

conception to establish construct validity and reliability (King, 2009). Yeboah (2012) reported

"triangulation and member checking of results from the pilot study also helped to validate

formation of the instrument" (p. 66). Inter rater reliability has been checked by examining

agreement in the classification of factors that promote transformative learning for study abroad

participants (Yeboah, 2012).

Scoring. Scoring will follow the process outlined by King and will be useful for

authenticating responses during the data cleaning process (King, 2009). King (2009) requires

each questionnaire to be scored with the Perspective Transformation Index (PT-Index). The

index allows researchers to distinguish between perspective change resulting from study abroad

programs and perspective change resulting from unrelated events or external sources. A PT-

Index of 3 indicates perspective change resulting from study abroad programs and activities. A

PT-Index of 1 indicates no perspective change. King's (1997) pilot study indicated 37.3 percent

of students reported transformative learning according to this scale. Later, in a study of ESL students, 66.7 percent of students reported perspective transformation (King, 2000). In her 2010 study, Brock reported 48.8 percent of participants reported perspective transformation. We hypothesize study abroad participants will experience perspective change akin to ESL students, at or around 66.7 percent.

Travel Efficacy. In this study, travel efficacy refers to beliefs about one's ability to plan and prepare to travel comfortably and confidently outside of one's community. Travel efficacy will be measured using an internal instrument employed by the Global Explorers (GEx) organization. It includes statements such as: "I am confident in my ability to successfully travel out of my community" and "I am comfortable traveling to areas where the culture is different from my own" (Global Explorers, 2011). These items are measured on a 5-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree). In terms of reliability, Global Explorers (2011) reported a Cronbach's alpha score of 0.77.

Intercultural Competence. Intercultural competence refers to "the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes" (Deardorff, 2006, p. 33). It will be measured using the Off Bound Adventures (2013) cultural awareness survey (CAS) and includes five statements, such as: "I value people of different social, ethnic, and cultural backgrounds" and "I am good at working with people of other social, ethnic and cultural backgrounds" (OBA, 2013). These items are measured on a 5-point Likert scale, from 1 (decreased) to 5 (increased).

Intention to engage in international education or employment. According to Mezirow (1994), "Action in transformation theory means making a decision, not necessarily an immediate behavior change" (p. 226). It results in "learners motivated to take collective social action to

change social practices, institutions, or systems" (Mezirow, 1994, p. 226). According to Cranton (1994) "the process may be internal" (Cranton, 1994, p. 70). As stated here, internal motivation or intent to pursue a certain course of action is a positive predictor of future action. In line with this thinking we will measure future action in terms of intent to engage in international education or employment (see appendix D). These items include statements like: "I intend to continue coursework in international business." A pilot study will be conducted to review the understandability and validity of questions. Five students with travel or study abroad experience will be asked to review the questions for both coherence and face validity. Intention items will be measured on a 5-point Likert scale ranging from 1 (do not intend to) to 5 (strongly intend to).

Controls. A set of questions will be asked to control for limiting factors and variables affecting the level of disorientation. These questions will account for prior travel experience, mission experience, language ability, and motivations to travel. A pilot study will be conducted to review the understandability and validity of questions. Five students with travel/study abroad experience will be asked to review the questions for both coherence and face validity. Control items will be measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Demographic Information. Demographic information will be collected as part of the Learning Activities Survey and includes gender, marital status, race, current major, prior education, semesters enrolled at the university, and age. Demographics will act as control variables and help describe the population.

Analysis

Data will be analyzed using the R statistical package, an open source software providing a broad array of statistical procedures (R Project, n.d.). First, basic descriptive statistics of the

demographic data will be calculated in R, including average (mean, median, and mode) values of the dependent and independent variables. In terms of hypothesis H_{a1}, simple descriptive statistics will be used to collect "frequencies, means, [and] ranges" and to determine the percent of study abroad participants who reported perspective transformation (King, 2009). This number will be compared to the percentages of perspective transformation reported in King's (1997) pilot test (32.5% experienced PT) and subsequent research in traditional classroom settings (66.7% experienced) (King, 2000). Additional analysis will be conducted to identify prominent themes in the free responses.

In terms of hypothesis H_{a2}, the dependent variable will be transformative learning. The independent variable will be the summative score of the ten phases of transformative learning. The model will also include demographic information, which will allow us to account for variance explained by demographic variables and the phases of transformative learning. Because LAS data is collected primarily in check-box form, variables will be converted to binary levels of measurement. According to Brock (2010) a positive relationship between transformative learning and the phases of transformation has already been established, therefore, one tailed t-tests and logistic regression will be used to assess the relationship between transformative learning phases and reported perspective transformation (Brock, 2010; R Project, n.d.). Levene's test for equality of variances will be run prior to testing. Comparisons will be made between PT indices 1 and 3.

In terms of hypothesis H_{a3}, the differences in pre and post trip valuations for each of the three selected study abroad outcomes will act as the dependent variables. The reported sum of transformative learning phases will act as the key independent variable. The model will also include demographic information and control variables to account for variance explained by

these factors. Because the difference in pre and post reports of study abroad outcome scores is measured on an interval level, linear regression will be used to analyze relationships. Outcomes measures will be compared between PT Indices 1 and 3. Alpha coefficients of 0.05 will be used to establish statistical significance in terms of both hypotheses.

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Appendix A-1: Consent to Use the LAS

Hi Garrett,

Thank you for contacting me.

If you have the 2009 book, it is the manual and gives permission as long as you follow

procedures.

Please DO NOT USE Likert scales AND any additional questions need to be vetted as a pilot

study.

Good luck

Thank you,

Dr. Kathleen P. King

Kathleenking@usf.edu

Professor, University South Florida

Drkpking@gmail.com

Appendix A-2: Implied Consent Form

Implied Consent

My name is Garrett Stone, I am a graduate student in the Marriott School of Management at Brigham Young University and this summer I will be conducting a study of your international study program. I am conducting this research under the supervision of Dr. Brian J. Hill from the Department of Youth and Family Recreation and Dr. Lee H. Radebaugh from the Marriott School's Center for Global Management. You are being invited to participate in this study of transformative learning in study abroad settings. I am interested in finding out how meaningful learning occurs in the context of study abroad and how learning activities influence study abroad outcomes.

Your participation in this study will require the completion of a brief questionnaire concerning your study abroad experience. This should take approximately 25 minutes of your time. Your participation will be anonymous and you will not be contacted again in the future. You will not be paid for being in this study. This survey involves minimal risk to you. The benefits, however, may impact society by helping increase knowledge about study abroad programming and program outcomes.

You do not have to participate in this study if you do not want to. You do not have to answer any question that you do not want to answer for any reason. We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem you may contact me, Garrett Stone at (530) 302-7312 or at gstone621@gmail.com.

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

The completion of this survey implies your consent to participate. If you choose to participate, please complete the attached survey by **[return date]**. Thank you!

Appendix A-3: Learning Activities Survey

LEARNING ACTIVITIES SURVEY (LAS)

This survey helps us learn about the experiences of study abroad participants at BYU. We believe that meaningful learning occurs when adults engage in international study. Only with your help can we learn more about this. The survey only takes a short time to complete, and your responses will be anonymous and confidential. Thank you for being part of this project; your cooperation is greatly appreciated.

1. Thinking about your study abroad experience with BYU, *check off any statements that may apply. (It is okay not to check those items in question # 1 that do not apply to you. If no statements apply, check "M" below).*
  - ☐ A. I had an experience that caused me to question the way I normally act.
  - ☐ B. I had an experience that caused me to question my ideas about social roles.
  (Examples of social roles include what a mother or father should do or how an adult child should act.)
  - ☐ C. As I questioned my ideas, I realized I no longer agreed with my previous beliefs or role expectations.
  - ☐ D. Or instead, as I questioned my ideas, I realized I still agreed with my beliefs or role expectations.
  - ☐ E. I realized that other people also questioned their beliefs.
  - ☐ F. I thought about acting in a different way from my usual beliefs and roles.
  - ☐ G. I felt uncomfortable with traditional social expectations.
  - ☐ H. I tried out new roles so that I would become more comfortable or confident in them.
  - ☐ I. I tried to figure out a way to adopt these new ways of acting.
  - ☐ J. I gathered the information I needed to adopt these new ways of acting.
  - ☐ K. I began to think about the reactions and feedback from my new behaviors.
  - ☐ L. I took action and adopted these new ways of acting.
  - ☐ M. I do not identify with any of the statements above.

2. During your time studying abroad with BYU, do you believe you experienced a time when you realized that your values, beliefs, opinions, or expectations had changed?

  - ☐ Yes. *If "Yes," please go to question #3 and continue the survey.*

  - ☐ No. *If "No," please complete the demographic information below*

3. Briefly describe what happened.

Pilot Questions
On a scale from 1 to 100:
  4. How disorienting (new, novel, uncomfortable, or confusing) was the experience?
  5. How significant was the perspective change reported in questions 2 and 3?

Demographic Information
(Please check your response under each question)
  1. Sex:
     - ☐ Male
     - ☐ Female

2. Marital Status:
   - ☐ Single
   - ☐ Married
   - ☐ Divorced/separated
   - ☐ Widowed
3. Race/Ethnicity
   - ☐ White, non-Hispanic
   - ☐ Black, non-Hispanic
   - ☐ Hispanic
   - ☐ Asian or Pacific Islander
   - ☐ Arab/Middle Eastern
   - ☐ Other: (please specify) _____
4. Major/Degree
   - ☐ Business Management
   - ☐ Accounting
   - ☐ Other: (please specify) _____
5. Previous Educational Level
   - ☐ High school diploma
   - ☐ Associate's Degree
   - ☐ Bachelor's Degree
   - ☐ Master's degree
   - ☐ Doctorate
   - ☐ Other: (please specify) _____
6. How many semesters have you been enrolled at USF? _____
7. Age:
   - ☐ 19 years and under
   - ☐ 20-24
   - ☐ 25-29
   - ☐ 30-34
   - ☐ Over 35 years
8. Pilot Questions:
   Please check the box if you have experienced any of the following
   - ☐ I traveled internationally prior to participating in this study abroad program
     If yes, what was the nature of your visit?
     - ☐ Academic
     - ☐ Purely recreational/Tourism
     - ☐ Other: (please specify) _____
   - ☐ I served an LDS full-time mission prior to participating in this study abroad
     If yes, was it?
     - ☐ In a foreign country, speaking a foreign language
     - ☐ In the United States, speaking a foreign language
   - ☐ I was proficient in the language of the host country prior to this study abroad

   Which of the following describes your motivation for participating in this study abroad?
   - ☐ Purely recreation/Tourism
   - ☐ Academic
   - ☐ Career Development
   - ☐ Other: (please specify) _____

Thank you for completing this questionnaire!

Appendix A-4: Additional Questionnaire Items

Travel Efficacy:

I am confident in my ability to successfully travel out of my community	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I am comfortable traveling to areas where the culture is different from my own	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I feel confident planning and preparing for travel	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I plan to travel out of my community in the future	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5

Intercultural Competence:

I value people of different social, ethnic, and cultural backgrounds	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I feel comfortable working with people of other social, ethnic, and cultural backgrounds	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I am good at working with people of other social, ethnic and cultural backgrounds	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I understand ways of living of different communities	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I can identify contrasts between social classes and understand the challenges of inequality	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5

Intentions to Engage in International Education and Employment:

I intend to participate in another study abroad, international internship, or global travel experience	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I intend to work internationally	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I intend to work in a domestic organization that operates internationally	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I intend to pursue additional language training	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I intend to obtain the global management certificate	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I intend to obtain the foreign language certificate offered by the humanities department	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5
I intend to continue coursework in international business at Brigham Young University.	1 2 3 4 5
Before participating in the study abroad how would you have responded to this statement?	1 2 3 4 5