

The Development and Validation of a Study Abroad Assessment Tool

University of Delaware
Institute for Global Studies

Background Information

The University of Delaware's Institute for Global Studies organizes approximately 60 short-term faculty-led study abroad programs on six continents annually, with over 1,100 students participating. An additional 100-200 study abroad on semester and exchange programs. Such a vast array of programs attracts students from a wide variety of academic disciplines, and the faculty-led programs, in particular, often have specialized, discipline-based experiences and goals. Therefore the need arose for a general assessment tool to measure changes in areas of intercultural competence deemed critical for all University of Delaware study abroad programs: **knowledge of host site, global engagement, tolerance of ambiguity, and diversity engagement**. This initial pilot study resulted in the emergence of such an instrument.

Purpose

Our main aim for this study was to develop a new and reliable instrument for measuring learning outcomes of students participating in University of Delaware study abroad programs. Additionally, we attempted to determine the underlying factor structures and examine the validity thereof. To this end we conducted confirmatory factor analyses, examined the inter-item correlations, and examined the preliminary pre- to post-study abroad change in a volunteer subset of study abroad students.

Participants

Participants were 454 University of Delaware short-term study abroad students who were sampled in the months prior to their winter 2014 study abroad program. The procedure received research approval from the university's Institutional Review Board. The 1,017 students registered for the winter 2014 study abroad program received a survey request via Qualtrics from the Study Abroad Office requesting their participation. Those who were interested in participating completed the survey through Qualtrics in November or December of 2013. A total of 550 students began the survey, our final sample included only those participants who completed the survey through the first two sub-scales of the survey, leaving us with a total sample size of 454 (45% of the total population of winter study abroad students). The final sample was composed mostly of female (n=340, 75%) full time students (99%). The majority of the students were college juniors (45.6%), 24.2% were sophomores, 24% seniors, 5.7% freshman, and only 0.4% were graduate students. Most of the students (96.9%) were U.S. citizens and the majority self-identified as White (93.2%). Students were registered for one of the study abroad destinations available for winter 2014 session and agreed to participate in this voluntary survey in addition to the mandatory one which they completed prior to participation in this study.

For the pre- to post- study abroad analyses we invited the 454 winter 2014 study abroad participants who had completed our pre-study abroad survey to complete the survey again after their study-abroad experience, in February 2014. Of the 454 participants who received emails requesting their participation, 263 (56%) participated in the follow-up survey. In this sample, 81.0% of respondents were female, 93.6% were White, 98.5% of the sample were full-time students, and 97.0% were U.S. citizens. The majority of the student respondents (49.8%) were juniors, 24.7% were sophomores, 19.8% were seniors, and only 5.3% were freshman.

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Data Analysis

Factor analyses procedures were used to analyze the data. The MPlus version 7 software (Muthen & Muthen, 2008-2011) was used to perform all analyses. We used the MLR (maximum likelihood estimator with robust standard errors) estimator, as it is robust to potential non-normality. To analyze the model fit, we used the following fit indices and approximate cutoff values: (1) Root Mean Square Error of Approximation (RMSEA) close to .06 or below, (2) Standardized Root Mean Square Residual (SRMR) close to .08 or below, and (3) Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) values approaching .95 or greater (Browne & Cudeck, 1993; Hu & Bentler, 1999; Kenny & McCoach, 2003) and small Chi-square values. Confirmatory factor analyses (CFAs) were examined for each sub-scale on the study abroad assessment measure. Reliability and inter-item correlations were conducted using IBM SPSS 20 software.

For our pre- to post- study abroad analyses we examined the amount of average change observed in participants on our key constructs, measured by the newly developed scales. In order to do this we conducted paired-samples t-tests to analyze the data from pre- to post- study abroad experience. These analyses were conducted using IBM SPSS 20 software. In all areas significant change was found pre-to-post.

Measurement Background

- Tolerance for Ambiguity Scale- Multiple Stimulus Types of Ambiguity Tolerance (MSTAT-II; McLain, 2009)
- “Global Engagement” Scale- Hett Scale of Global Mindedness (Hett, 1992)
- Knowledge of Host Site Scale- UD researcher developed
- “Diversity Inclusion” Scale- UD researcher developed

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