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Journal of International Students
Volume 15, Issue 6 (2025), pp. 59-82
ISSN: 2162-3104 (Print), 2166-3750 (Online)
jistudents.org
https://doi.org/10.32674/ka1man91

Post-Pandemic Intercultural Development Trends Among American Undergraduate Students

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ABSTRACT

Shifts in attitudes toward tourism management have permeated the literature on consumer behavior since the COVID-19 pandemic. Marketing strategies have targeted young people because, in an increasingly digital social world, global travel is especially appealing to this demographic, which feels a sense of isolation exacerbated by the pandemic. Postpandemic studies indicate that intercultural awareness and experiences are particularly sought after by American youth, who are comparatively isolated geographically from the rest of the world. This isolation has led to a longstanding deficit in global intercultural knowledge, as typified by high failure rates among American expatriates employed abroad. This phenomenon has prompted American institutions of higher education to create short-term study abroads to immerse students in global experiences proactively. These have been increasingly offered since the pandemic. To further examine trends in their intercultural skillsets, this study examined the intercultural capabilities and development of undergraduate students enrolled in for-credit trips abroad both before and after the pandemic.

Keywords: American expatriates, intercultural assessment tools, intercultural competencies, global awareness, short-term study abroad

Intercultural insight is often lacking in Americans because of the geographical isolation of the United States, leading to a deficit in intercultural competencies. This intercultural development gap is exemplified by historically high failure rates

of expatriates working abroad, which have been exacerbated due to the pandemic. These failed assignments abroad have cost American organizations millions of dollars. Harris (2008, p. 184) pinpointed the key to success in a typical expatriate assignment as "extracultural" openness when faced with opportunities to engage in new cultural environments.

US institutions of higher education have attempted to remedy this deficiency by embedding globalization into the curriculum and, in particular, by offering short-term study abroads as part of undergraduate coursework. Avcılar and Gök (2022) highlighted the importance of higher education in globalizing students and preparing them for real-life experiences beyond college, stating that the "intercultural status of university students holds a special place in terms of integration" (p. 531). Quantitative tools have been developed to measure ability and willingness to connect with those from other cultures and have been implemented to gauge intercultural competencies, particularly for Americans, who are less likely to be exposed to nondomestic organizational norms. However, young Americans have especially experienced a sense of loneliness along with a coinciding dearth of intercultural opportunities due to pandemic-era global travel bans that denied them opportunities to engage in experiential learning related to intercultural development.

This study aims to evaluate the current intercultural deficiencies of undergraduate American students compared with prepandemic levels. As expatriate experiences continue to be made available among US-based organizations, it is more incumbent than ever upon American universities to facilitate globalization experiences for students to prepare them for their futures in an ever-increasing international world. Campos et al. (2022) reported that European students traveling abroad were quickly able to adapt to new cultures during their experiences abroad and did not face insurmountable challenges such as anxiety and stress. They noted that "future research may extend their study's contributions by drawing on other samples of international students outside the EU … by investigating the relationships with other theoretically related constructs such as cultural competence" (p. 436). The current study will expand upon their study by examining the intercultural development of American undergraduate students and administering commonly used intercultural competency tools (i.e., the Intercultural Development Inventory and the Miville–Guzman Universality–Diversity Scale) to examine the effects of studying abroad on intercultural development.

Hypotheses

The following hypotheses were proposed:

- H_1: Participation in short-term study abroad positively impacts intercultural competencies, as measured by the M-GUD-S and IDI.
- H_2: There are differences in intercultural competencies between pre- and post-COVID-19 pandemic student populations.

LITERATURE REVIEW

"The 21st century is one of unremitting globalization" (Mendenhall et al., 2008, p. 3). Wiseman (2003, p. 422) defined intercultural awareness as the "ability to discriminate and experience relevant cultural differences" and noted that America's relative isolation from the rest of the world exacerbates Americans' lack of intercultural development, which manifests when they work and travel abroad. As of this writing in 2025, more than 8 million American expatriates are working outside the U.S. (World Population Review, 2025). The US's geographic separation has traditionally led to a deficit in intercultural capabilities (Stein-Smith, 2016), and American expatriates commonly face cultural integration challenges in adjusting to nondomestic norms of behavior in other countries (Bader et al., 2016; López Morales, 2023).

In the workplace, the majority of American expatriate failures result from employees' inability to adjust to the new culture due to a lack of organizational focus on cultural training before the new international assignment (Brinkmann, 2025; Harris, 2008; Selmer, 1995; Weber, 2013). Certainly, time, money, and organizational resources are at risk owing to failures in these endeavors, and as such, there has been an increasing amount of literature devoted to how to best establish American expatriates for success as they integrate into new global cultures (Deardorff, 2015; Enatto, 2024; Jackson, 2008; López Morales, 2023; McNulty & Selmer, 2017; Moore & Mehlenbacher, 2009; Reish, 2011; Swanagon & Simpson, 2023; Tang & Chao, 2010; Vance & McNulty; 2014). Lowe (2005) suggested that their job performance often suffers because they do not feel comfortable in their new surroundings, whereas Breiden et al. (2004) confirmed that American workers who adjust well to the new culture also tend to be more committed to the organization.

In the context of higher education, however, Ren and Wang (2022) noted that undergraduate students with international learning experience were able to develop intercultural competencies, confirming Harris' (2008) finding that a basic openness to new cultures predicted American expatriates' success. Intercultural competency refers to one's adaptive capacity to integrate into and effectively accommodate the social and professional environments of a host environment that are different than one's original world view (Leung et al., 2014; Mahapatra et al., 2025; Tarchi & Surian, 2022;Taylor, 1994). Competency in navigating new cultures is a prerequisite for success in international assignments, regardless of the culture of origin (Goncalves, 2024; Wiernick et al., 2017). Considering these necessary characteristics of successful US expatriates, the current study asserts that prior global and non-American cross-cultural experiences should be more heavily weighted to better forecast the likelihood of success for a potential expatriate assignment before resources and company time are devoted to it.

Postpandemic trends indicate that intercultural experiences are strongly desired by American youth (Baratti, 2021; Harper, 2024). Global travel decreased by 72% during the early months of the pandemic (World Tourism Organization, 2019). For this and other reasons, young people have felt a sense of isolation in an increasingly digital social world, so connectivity with the world and new

environments outside of their normal comfort zone have become more appealing to them. Millennials and Generation Z, the generations who grew up during the advent of the internet, are said to face a generational and cultural gap that causes them to face more organizational challenges than older employees do, especially Baby Boomers (Freedlander, 2021; Petersen, 2021). This lack of integration is a "widespread concern" (Myers & Sadaghiani, 2010, p. 225). Nevertheless, young Americans average more travel per year than other generations do (Magennis, 2023) and seek even more: since the pandemic, travel has been an increasingly vital activity that young generations aspire to engage in (Irimiás, 2023; Seyfi et al., 2023; Stylos et al., 2021). Generations Z, who were born in the late 1990s and early 2000s and are currently in high school and college, similarly seek more international travel than prior generations do.

Bates and Atef-Rehal (2017) concluded that "higher education practitioners and educators should prioritize intercultural competency education" (p. 43). In efforts to mitigate the gaps in skillsets that cause so many expatriate failures abroad, colleges across the United States have initiated immersive curricular programs to address this deficiency. As such, preparing students to succeed in global environments has become more salient, as US universities have been integrating intercultural curricula into their coursework and study abroad programs in an attempt to provide preemployment global immersion opportunities to experience unique international cultures (Global Reach, 2025; IDP Education, 2025; KC Overseas Education, 2024; Luan et al., 2024; Millington et al., 2024). Because these experiences have been found to be positively correlated with future earnings (Asankulova & Thomsen, 2024; Giorgio, 2022; Netz & Cordua, 2021) and to predict success in initial employment (Farrugia & Sanger, 2017; Goers, 2020; Mowreader, 2024), opportunities to engage in these trips have become an important focus of higher education.

Offering short-term study abroad trips that last less than 3 weeks increases the likelihood that students will be able to take part, especially traditionally underrepresented domestic minority groups and first-generation college students, who often have not had the opportunity to travel abroad and may have other work obligations over the summer break from the traditional two-semester format. These trips have begun to embed strategic intercultural competency pedagogies into their programs and use related assessment tools to measure students' intercultural capabilities (Iskhakova & Bradly, 2022; Nguyen, 2017; Schenker, 2019). Barkley and Barkley (2013) stated that true intercultural experiences are an important ingredient of any short-term study abroad, and numerous other scholars have noted that students can gain true intercultural insight from short-term study abroad if curricula are appropriately embedded (Chieffo and Griffiths, 2004; Martinsen, 2011; Vande Berg et al., 2012). Teichler and Steube (1991) surmised that the planned excursions of these trips make or break students' experiences. Therefore, the assessment of learning and intercultural development as a result of participation in these trips is especially beneficial since they are briefer in duration and feature targeted pedagogical strategies to facilitate intercultural learning.

Del Villar (2010) reported that the intercultural sensitivity of students who travel increases as the time they spend in other countries increases. However, short-term studies abroads tend to mirror the timeframes of vacationers and other global travelers. Consumer behavior research in the discipline of tourism has not only assessed satisfaction with hotels, airlines, and other logistics but also focused on measuring growth in intercultural learning during a tourist's global journeys (Lantz-Deaton, 2017), as those who travel abroad show a willingness to engage in new cultural activities (Ianniello, 2023; Nwanna, 2004). There are various means of assessing and obtaining data in tourism research, such as interpretive phenomenological analysis (Tovmasyan, 2019), the SERqual model (Chihwai, 2019), user-generated content methodologies (Li & Cao, 2022), and email-based and online surveys. The findings of these studies can serve as a basis for similar analyses of the impact of short-term study abroads.

Assessment tools are frequently used in higher education to gauge student learning and understanding (Alt & Raichel, 2021; Herman & Hilton, 2017; McConlogue, 2020; Zlatkin-Troitschanskaia et al., 2017; Zlatkin-Troitschanskaia et al., 2018) and to measure student competencies in various fields of study. In the context of this study, these tools measure intercultural competence, or the ability of an individual to communicate effectively, to accept people from different cultural backgrounds, and to integrate into host cultures where norms of behavior are different (Avcılar & Gök, 2022, p. 532). The results of these assessments are used to develop a curriculum that fosters learning at an appropriate skill level.

The precise quantification of intercultural competency has recently become a topic of interest in the development of assessment tools, as the ability to proactively gauge intercultural competence helps course developers better evaluate and integrate appropriate curricula into courses. However, while some capabilities, such as math acumen, are fairly easy to gauge, assessing intercultural development has been "plagued with problems of conceptual ambiguity and the lack of valid instruments for measuring" (Portalla & Chen, 2010, p. 21). For example, these measures must attempt to quantify performance in ambiguous dimensions, such as the dining culture of international restaurants. Furthermore, "the current state of the literature [is] murky in terms of the clarity of the ICC (intercultural competence construct)" (Griffith et al., 2016, p. 1). Even so, intercultural assessment tools are becoming more common, and these instruments have been increasingly utilized to gauge students' intercultural development and understanding (Alt & Raichel, 2021; Baiutti et al., 2024; Herman & Hilton, 2017; Lokkesmoe et al., 2016; McConlogue, 2020; Sarwari et al., 2024; Zlatkin-Troitschanskaia et al., 2017; Zlatkin-Troitschanskaia et al., 2018).

In light of several factors, including the difficulties of US expatriates, the desire of American youth to travel, increased opportunities to engage in short-term study abroad, and the lack of intercultural experience during the pandemic, this study assesses undergraduate students' intercultural development as a result of short-term study opportunities offered both before and after the pandemic at an American institution of higher education through several common intercultural competence assessment tools.

METHOD

The Association of American Colleges & Universities (AAC&U) Intercultural Knowledge & Competence Value rubrics and the Developmental Model of Intercultural Sensitivity are standard instruments used to assess intercultural competencies (Anderson & Lawton, 2011; Bennett, 1993; Sinicrope et al., 2007). The Intercultural Effectiveness Scale (IES) is an alternative approach to measuring cultural development that was derived from an instrument developed by Hammer et al. (1978) "to determine an individual's ability to acclimate and function in another culture" (Portalla & Chen, 2010, p. 47). The IES pinpoints the competencies that have been found to be most important when interacting with people with various customs and mores.

The Intercultural Development Inventory (IDI) is also increasingly utilized to gauge cross-cultural competence and intercultural capabilities (Paige et al., 2003; University of Michigan Center for Research on Learning and Teaching, 2021). The IDI measures competence via three overarching intercultural skillsets: perceived orientation (PO), developmental orientation (DO), and orientation gap (OG). The IDI evaluates PO relative to DO: PO reflects how the individual rates their intercultural competence, and DO represents their real or actual level of intercultural ability, each of which is measured on a scale between 55 and 145. The difference between the PO and DO scores is the OG score, which represents the extent to which a person overestimates or underestimates their level of intercultural competence (Hammer, 2012). A larger gap reflects the respondent's overestimation/underestimation of their perceived competence compared with their actual intercultural competence, with seven points or more indicating a meaningful magnitude of difference.

The IDI places orientations toward individual cultural skillsets along a continuum from monocultural attitudes in categories such as denial and polarization to more global mindsets such as acceptance and adaptation. The five orientations on the continuum represent respondents' ability to bridge cultural differences in application or in their actual lives, where shifts up the continuum indicate a more intercultural mindset. For example, the adaptation stage on the IDI continuum represents the ability to shift one's own cultural perspective toward the societal norms of others beyond one's original customs and thus to navigate cultural differences through actual behaviors rather than through a theoretical lens.

Another instrument used to quantify intercultural competency is the 45-item Miville-Guzman Universality-Diversity Scale (M-GUDS), which measures the latent construct of universal-diverse orientation (UDO*)* related to how well an individual both recognizes and accepts similarities and differences between people (Kegel & DeBlaere, 2014; Viljoen & Els, 2023). The M-GUDS-S comprises the subscales Relativistic Appreciation of Oneself and Others (RA), Diversity of Contact (DoC), and Sense of Connectedness. These represent the otherwise unidimensional UDO construct, a global standard associated with multicultural awareness (Miville et al., 1999; Roberts et al., 2009). The developers of the M-GUDS-S (Miville et al., 1999) utilized a factor analysis approach to

reduce the 45 items to a concise 15-item short-form survey, with 5 questions associated with each of the three correlated but nonredundant factors RA, DoC, and Comfort with Differences (CwD). Miville et al. concluded that this factorized model outperformed a single factor model. Answers are given on a Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree) (see M-GUDS-S survey questions in Appendix 1).

In the current study, the IDI and Miville-Guzmann Universality-Diversity Scale: Short Form (M-GUDS-S) surveys were administered to undergraduate students enrolled in a public higher education institution in the U.S. (a member of the AAC&U) who participated in a for-credit study abroad trip to Central Europe. Students completed the two assessment instruments by email twice, as a pre- and a postsurvey (taken approximately one week before the trip and a week after returning from the trip). The data from the repeated measurements were utilized for subsequent data analysis, which considered individual items, summed scores from individual subscales, and overall summed scores. The results were used to assess and examine tendencies in intercultural development among the students who participated.

Data collection

Survey instruments

The M-GUDS-S was utilized during two short-term study abroads: a Maymester trip in 2018 ($N = 24$) and a spring break trip in 2022 ($N = 23$). The dataset for 2022 had 4 missing values: Q5(Pre) and Q11(Post) for matching pair 8, Q8(Pre) for matching pair 12, and Q12(Pre) for matching pair 22. The distribution of responses was grouped by subscale and separated by *term* (pre/post; i.e., the survey was completed before or after the trip) and year (2018 or 2022). Questions associated with the CwD subscale were reverse-scored for ease of interpretation so that low-value responses are analogous to high-value responses for the other subscales. The students' subscale scores were calculated by summing across the five responses for each of the three subscales (CwD scores were reverse-coded). The students' overall M-GUDS-S scores were calculated by summing the scores across the 15 responses for each student within each term (CwD scores were reverse-coded). A full list of instrument prompts and a summary of the responses are available in the appendix (2, 3, 8).

Two distinct groups of students completed the IDI during the two short-term studies. The IDI is proprietary, and student responses to individual items were not available. The calculated results for each student were provided directly and could be matched within a student before and after participation. A summary of the IDI output is available in the appendix (12, 13).

Statistical analysis

Individual M-GUDS-S items were evaluated by a cumulative odds mixed model that considers an order response (i.e., 1--6 with a definitive hierarchical

order) and evaluates the cumulative odds that a response is at least a particular value, where odds are defined as the ratio of probability (e.g., response less than or equal to 3) to its complement probability (i.e., that the response is greater than 3). The M-GUDS-S subscale and overall scores and the IDI metrics were evaluated with linear mixed effect models. The M-GUDS-S models included fixed effects for *term* (*pre- or postparticipation) and year* (2018, 2022), their interaction, and a random intercept to account for repeated measurements of students. IDI metrics were evaluated with a linear mixed effect model. The IDI models included fixed effects for *term* and *period* (Maymester, Spring Break), their interaction, and a random intercept to account for repeated measurements of students. Factors for cumulative odds models and random intercepts for all models were evaluated via likelihood ratio tests. Fixed factors for linear mixed effects models were evaluated by ANOVA with a type III sum of squares using Kenward-Roger degrees of freedom. Post hoc comparisons were performed by estimated marginal means using Kenward-Roger degrees of freedom. The pre- and postpandemic environments were hypothesized and explicitly considered potential effect modifiers. Statistical significance was defined as $\alpha = 0.05$; statistically nonsignificant results are explicitly identified when discussed. All the statistical analyses were performed via R version 4.3.3. The statistical results not shown are available in the appendix (4-6, 9, 12-14).

RESULTS

Significant or marginally nonsignificant results according to the likelihood ratio test were found for Q6 (term $p = 0.01$, term: year $p = 0.01$), Q7 (term $p = 0.02$, year $p = 0.05$), Q13 (term $p = 0.02$), and Q5 (term $p = 0.004$, year $p = 0.06$). Random intercept variances were statistically significant in all four models.

For Q6 (Table 1 below), while there is no significant difference on average between years, there is a trend that individuals responded more positively following participation in 2022, whereas participation in 2018 demonstrated no effect. Since this is a question about being at ease with those of their own race, this might reflect that the 2022 trip shifted notions after a period of isolation during the pandemic when students were not commonly in contact with those from another race, presumably at social functions; the trip might have helped the postpandemic group broaden their perspectives.

Table 1: Analysis of Deviance for M-GUDS-S Q6 (Comfort with Differences)

Factor	LR Chisq	Pr(>Chisq)
Term	6.26	**0.01**
Year	0.09	0.77
Term:Year	6.67	**0.01**

Survey prompt: "I am only east with people of my race."

For Q5 (Table 2 below), responses were more positive on average following participation, meaning that the students felt that they could better understand a person after similarities and differences were determined, illustrating the importance of trip experiences in shaping attitudes toward accepting people from diverse intercultural backgrounds. Additionally, there was a marginally nonsignificant difference, with more positive responses in 2022, whereas changes associated with participation were comparable across years.

Table 2: Analysis of deviance for M-GUDS-S Q5 (Relativistic Appreciation)

Factor	LR Chisq	Pr(>Chisq)
Term	8.367	**0.004**
Year	3.572	0.06
Term:Year	0.012	0.911

Survey prompt: "I can best understand someone after I get to know how he/she is both similar and different from me."

For Q7, the same pattern was seen as in Q5 on average, with more positive responses following participation in the trip, at marginally nonsignificant rates for 2022 overall. Since this was the question about often listening to the music of other cultures, it is possible that experiencing new places and being exposed to different genres of music broadened the students' scope of musical influence. Since a positive trend in response was observed in 2022, it might be noted that, as in other postpandemic surveys (Baratti, 2021; Harper, 2024), young people aspiring to travel were already seeking out music from other cultures more often than before the trip (prepandemic) in efforts to gain intercultural experiences that filled a void.

Similarly, responses to Q13 were more positive on average following participation, suggesting that experiential learning during the trip shaped attitudes toward willingness to attend events where the student might get to know people from different ethnic backgrounds. Table 3 below presents the results. Taken together, the positive impact of experiences during the trip suggests the utility of short-term study abroad experiences in influencing student behavior. Specifically, short-term study abroads impact students' interest in participating in diverse social and cultural activities outside of their usual norms and customs, which is the spirit of the DoC subscale. This overarching theme of participating in diverse activities outside of one's comfort zone might also apply to tourists who wish to engage in intercultural experiences abroad with a duration of a week or several weeks, thus falling in line with post-COVID reports from young Americans who are seeking new and enriching postpandemic travel experiences. Moreover, the fact that responses to only a subset of questions were impacted highlights the importance of considering which aspects of intercultural perception may be influenced by such experiences, whereas different overall response profiles across years emphasize that different student populations do not necessarily exhibit the same baselines or responsiveness.

Table 3: Analysis of deviance for M-GUDS-S-Q7 and Q13 (diversity of contact)

Question	Factor	LR Chisq	Pr(>Chisq)
Q7	Term	5.21	0.02
	Year	3.77	0.052
	Term:Year	0.17	0.68
Q13	Term	5.07	0.02
	Year	0.13	0.72
	Term:Year	0.28	0.60

Survey prompt: Q7 "I often listen to music of other cultures." Q13 "I attend events where I might get to know people from different racial backgrounds."

The M-GUDS-S was devised through a factor analysis approach that assumes that responses to related questions are influenced by a common underlying latent factor; thus, the collective profile of responses within the established subscales serves as proxy measurements of these latent factors. The present analysis considers both the 5-question subscale scores and the overall 15-question composite score as outcome measures. There was a statistically significant (p = 0.006) average increase of 1 point for DoC (p = 0.006), with the data pooled across years. Although this increase is statistically nonsignificant (p = 0.096), the data suggest that the average DoC score increased by 1.8 points in the 2022 trip compared with the 2018 trip. No statistically significant fixed effects were found for either the CwD or the RA subscales.

For the 15-question composite score, there was a marginally nonsignificant average increase of approximately 1 point postparticipation (p = 0.053), averaged across years. Similar to the DoC subscale, there is a statistically nonsignificant average increase of approximately 2.5 points in the 2022 score relative to the 2018 score (p = 0.082). The possible increase in DoC scores from the 2018 trip to the 2022 trip might indicate a stronger desire and interest in participating in diverse social and cultural activities due to the students' perceived or real lack thereof during the pandemic. The variance of the random intercept was statistically significant in all the models, with a minimum interclass correlation coefficient of 64% across all the models. This highlights an opportunity to explore individual or student subgroup demographics that may contribute to differential experiences with study abroad participation.

Table 4: Group differences for the M-GUDS-S composite score

Comparison	Estimate	SE	df	t.ratio	p.value
Pre - Post	-1.32	0.66	42.69	-1.99	0.053
Year2018 - Year2022	-2.47	1.39	44.01	-1.78	0.082

Note: Kenward-Roger degrees of freedom

The original UDO construct depicts how well an individual both recognizes and accepts similarities and differences between people. It is reasonable to interpret item responses and subscale scores from the same perspective. The increases observed following participation provide evidence of the impact of experiential learning during the trip, suggesting that students' interest in participating in diverse social and cultural activities and the extent to which they value the impact of diversity on self-understanding and personal growth were enhanced. Although some differences are statistically nonsignificant, the data also suggest that different environmental contexts may influence the impact of these experiences. The higher scores observed in 2022 suggest that students might have intentionally sought out participation in diverse social and cultural activities outside of their usual norms and customs after the pandemic, since they had not had access to them due to restrictions imposed by the pandemic. This pattern is in line with reports in postpandemic surveys about the hope and desire to travel and learn more.

In contrast to the M-GUDS-S data, no statistically significant differences were identified from the IDI results. In particular, the lack of prepandemic surveys precluded the evaluation of potential differences associated with a prepandemic context. The M-GUDS-S scores provide additional evidence confirming the results of postpandemic surveys of young Americans indicating a greater desire to travel and reports of insight gained from participation in study abroads. Further research is warranted to characterize and maximize the pursuit and effects of experiential learning during global travel and intercultural experiences more completely. The experiences on the trips that formed the context of this study prompted more positive hopes and feelings toward engaging in further intercultural activities and supported the findings of many postpandemic studies that young Americans increasingly desire to travel abroad.

DISCUSSION

Patterns of intercultural competency indicate that specific areas of intercultural development skewed more positively after the conclusion of the trip. Similar opportunities for experiential learning in new cultures might be important for potential expatriates before international assignments to broaden their feelings toward new cultures. Organizations that are considering sending US employees on assignments abroad might consider immersing potential workers into short-term assignments ahead of time to provide them with new cultural situations as a filtering process before any firm decision is made about an international assignment. Since interest in the theoretical possibility of venturing outside of their usual norms of behavior by actively participating in diverse social and cultural activities is different than actually engaging, this filtering process is key. Like job shadowing and job rotation, experience in new patterns of behavior might help companies better identify employees who are more likely to be successful abroad.

Limitations to the present analyses include sample size and lack of student-level demographic data such as age. The students who participated in these studies

abroads were generally 18--22 years old, and emotional maturity could be an extraneous variable impacting their intercultural development. However, the current findings are similar to those of Campos et al. (2022), who reported that European students were able to adapt and display intercultural competencies. The majority of preparticipation responses to the M-GUDS-S items in this study fall within the positively interpretable half of the scale; thus, the main and modifier effect sizes are expected to be small and may suffer from small sample sizes. As such, additional studies on the intercultural capabilities and development of American undergraduate students are warranted. Alternatively, the 6-point scale may be insufficiently sophisticated to evaluate more nuanced impacts of each of the tested factors.

Students are assumed to represent an otherwise homogeneous population of young Americans with a predisposition for intracultural openness due to their willingness to enrol in short-term studies abroad. However, this assumption may fail to account for important confounding attributes related to the diversity of their backgrounds and their baseline levels of intercultural engagement. Regardless, the sample sets of students represent young Americans and their willingness to engage in intercultural experiences, given the lack of any notable decreases in DoC scores, which reflects a desire to participate in new intercultural activities and bodes well for their likelihood of future expatriate success.

Implications

The pandemic brought unanticipated challenges for young Americans. The inability to travel during the lockdown had an adverse effect not only on their intercultural capabilities but also on their ability to engage in new, unfamiliar environments. The differences in this study's participants' DoC scores from pre- to postpandemic indicate an increased desire and interest in participating in diverse social and cultural activities as well as a mindset that is willing to seek out intercultural environments even if they seem initially frightening. In addition, the answers to the question about attending events where the student might get to know someone from a different racial background were more positive on average after participation in the study abroad, demonstrating the importance of intercultural experiences. As such, it might be concluded that a general willingness to engage in intercultural activities is not enough when coupled with a lack of travel experience. Future researchers could investigate whether similar impasses have impeded the successful forecasting of successful US expatriate experiences due to the lack of short-term experience abroad to test whether potential expatriates are likely to be successful in the new host environment.

The participants' UDO scores indicate the impact of experiential learning opportunities on their willingness to explore new environments with unfamiliar surroundings. Since UDO depicts a general intercultural awareness related to both acknowledgment and acceptance of similarities as well as differences among groups, the intercultural "openness" highlighted by Harris (2008) as a key to success in expatriate assignments can also be attributed to American undergraduates after studying abroad. These findings confirm the students' basic

willingness to seek out new, unfamiliar environments and confirm the results of postpandemic tourism surveys inquiring about the hope and desire of young Americans to travel and learn about new cultures. More specifically, the posttrip statistics pointing to a greater desire to listen to music of other cultures confirm Harris' (2008) intercultural openness trait to experience new cultures, a solid indicator of intercultural competency, further solidifying the impact of experiential learning abroad on American undergraduates' view of the world.

These posttrip inclinations should serve as precursors to better filter potential expatriates through a process similar to job shadowing but in a new culture, such as a short-term trip to another country, to forecast their likelihood of success as expatriates. As such, it is incumbent in American universities of higher education to provide opportunities so that students can more easily engage through the university's short-term study abroad apparatus to provide attainable situations abroad that they would not feel comfortable engaging in by themselves. These experiences will help them prepare for life outside of college as well as potential new work environments outside the US.

Acknowledgment

In the preparation of this manuscript, we did not utilize artificial intelligence (AI) tools for content creation

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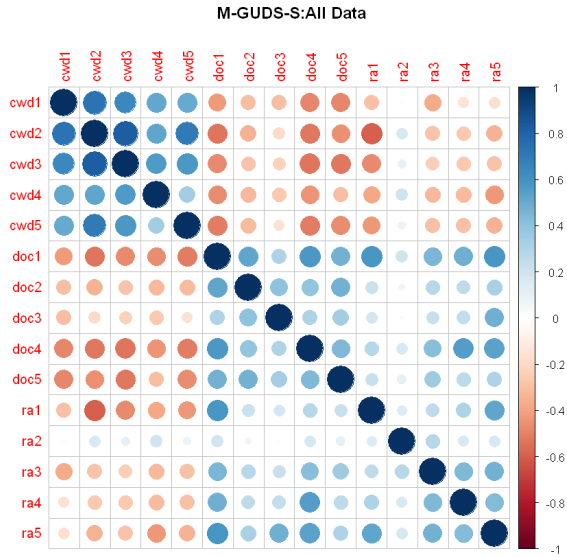
APPENDIX

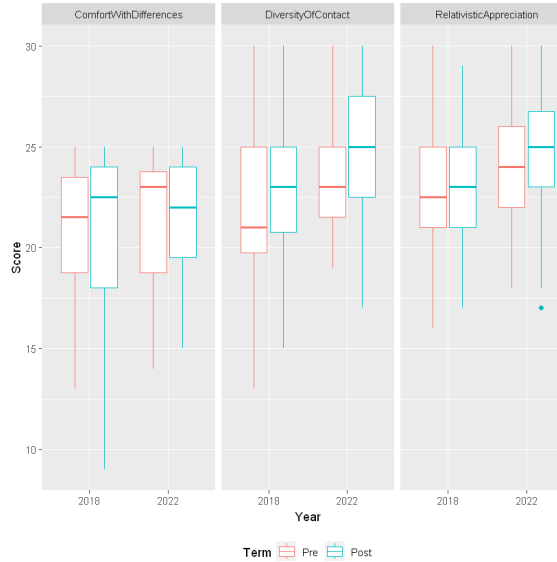
Appendix 1: M-GUDS-S item summary

	Questions	**Subscale**	**Coding**
Q1	I would like to join an organization that emphasizes getting to know people from different countries.	Diversity of Contact	Positive
Q2	Persons with disabilities can teach me things I could not learn elsewhere.	Relativistic Appreciation	Positive
Q3	Getting to know someone of another race is generally an uncomfortable experience for me.	Comfort with Differences	Reverse
Q4	I would like to go to dances that feature music from other countries.	Diversity of Contact	Positive
Q5	I can best understand someone after I get to know how he/she is both similar to and different from me.	Relativistic Appreciation	Positive
Q6	I am only at ease with people of my race	Comfort with Differences	Reverse
Q7	I often listen to music of other cultures.	Diversity of Contact	Positive
Q8	Knowing how a person differs from me greatly enhances our friendship.	Relativistic Appreciation	Positive
Q9	It's truly hard for me to feel close to a person from another race.	Comfort with Differences	Reverse
Q10	I am interested in learning about the many cultures that have existed in this world.	Diversity of Contact	Positive
Q11	In getting to know someone, I like knowing both how he/she differs from me and is similar to me.	Relativistic Appreciation	Positive
Q12	It is very important that a friend agrees with me on most issues.	Comfort with Differences	Reverse
Q13	I attend events where I might get to know people from different racial backgrounds.	Diversity of Contact	Positive
Q14	Knowing about the different experiences of other people helps me understand my own problems better.	Relativistic Appreciation	Positive
Q15	I often feel irritated by persons of a different race.	Comfort with Differences	Reverse

Appendix 2: (M-GUDS-S) Interitem correlation (Spearman) across all students, years, and participation periods



Appendix 3: (M-GUDS-S) Subscale summed score quartile boxplot



Appendix 4: (M-GUDS-S) Comfort with difference subscale summed score ANOVA (Type III SS) with Kenward-Roger degrees of freedom

	Sum Sq	Mean Sq	DenDF	F value	Pr(>F)
Term	0.48	0.48	44.25	0.16	0.688
Year	0.53	0.53	44.99	0.18	0.672
Term:Year	4.37	4.37	44.25	1.50	0.228

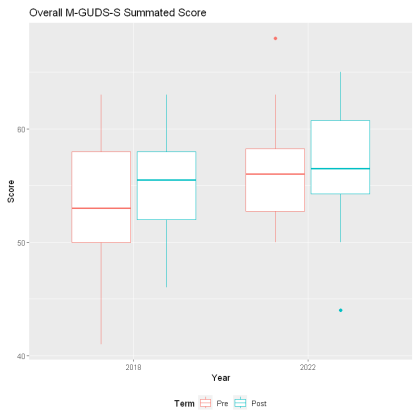
Appendix 5: (M-GUDS-S) Diversity of Contact Subscale Summated Score ANOVA (Type III SS) with Kenward-Roger Degrees of Freedom

	Sum Sq	Mean Sq	DenDF	F value	Pr(>F)
Term	24.52	24.52	45.00	8.21	**0.006**
Year	8.66	8.66	45.00	2.90	0.096
Term:Year	0.01	0.01	45.00	0.00	0.952

Appendix 6: (M-GUDS-S) Relativistic Appreciation Subscale Summated Score ANOVA (Type III SS) with Kenward-Roger Degrees of Freedom

	Sum Sq	**Mean Sq**	**DenDF**	**F value**	**Pr(>F)**
Term	5.22	5.22	43.34	1.39	0.244
Year	9.05	9.05	43.99	2.42	0.127
Term:Year	0.09	0.09	43.34	0.03	0.874

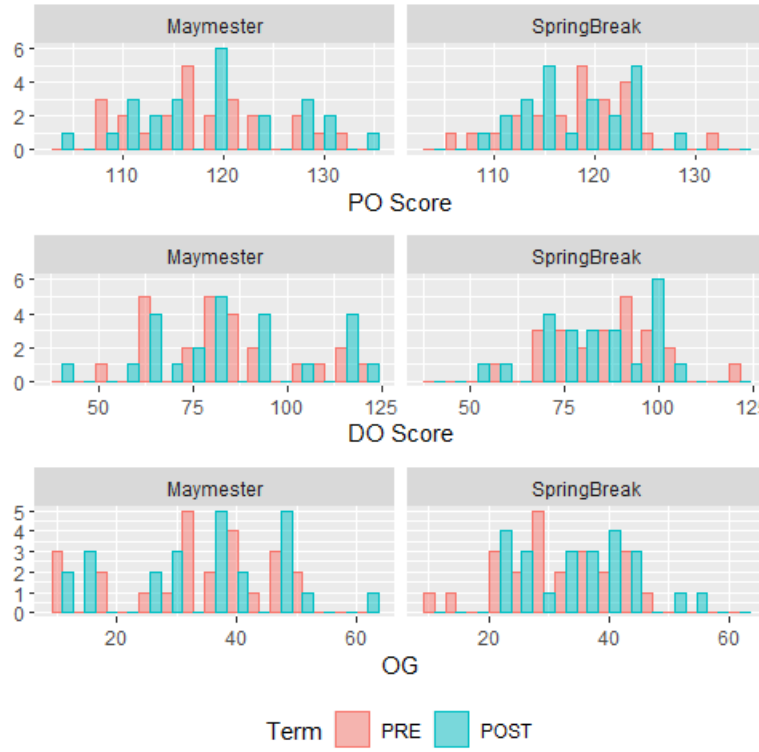
Appendix 8: (M-GUDS-S) Summated score quartile boxplot



Appendix 9: (M-GUDS-S) Full Summated Score ANOVA (Type III SS) with Kenward-Roger Degrees of Freedom

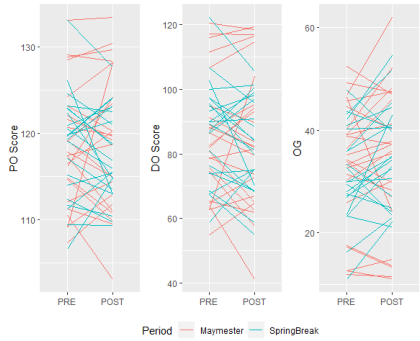
	Sum Sq	Mean Sq	DenDF	F value	Pr(>F)
Term	38.21	38.21	42.69	3.98	**0.052**
Year	30.48	30.48	44.01	3.17	**0.082**
Term:Year	3.35	3.35	42.69	0.35	0.56

Appendix 10: (IDI) Distribution of Pre- and Postparticipation PO, DO and OG Scores



Note: X-axis scales are different

Appendix 11: (IDI) PO score, DO score, and OG by individual student



Note: Y-axis scales are different

Appendix 12: IDI: ANOVA Table (Type III SS) Using Kenward-Roger degrees of freedom for the PO score

	Sum Sq	Mean Sq	DenDF	F value	Pr(>F)
Term	1.86	1.86	44.59	0.14	0.711
Period	2.00	2.00	45.94	0.15	0.701
Term: Period	15.55	15.55	44.59	1.16	0.286

Appendix 13: IDI: ANOVA Table (Type III SS) Using Kenward-Roger Degrees of Freedom for DO Scores

	Sum Sq	Mean Sq	DenDF	F value	Pr(>F)
Term	111.18	111.18	44.47	1.46	0.233
Period	0.01	0.01	45.96	0.00	0.991
Term: Period	117.34	117.34	44.47	1.54	0.221

Appendix 14: IDI: ANOVA Table (Type III SS) Using Kenward-Roger Degrees of Freedom for OG

	Sum Sq	Mean Sq	DenDF	F value	Pr(>F)
Term	84.04	84.04	44.42	3.04	0.088
Period	1.12	1.12	45.96	0.04	0.841
Term: Period	47.29	47.29	44.42	1.71	0.197