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High Impact Practices in Domestic and Study Abroad Service-Learning Kinesiology and Physical Education Courses

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Research shows that study abroad programs can benefit students in myriad ways including: fostering intercultural understanding, improving completion of degree programs, retention, community college transfer rates, as well as increasing GPA. The purpose of this study was to assess and evaluate engagement in high impact practices in college students (N=70) through international service-learning, domestic service-learning, and study abroad programs offered by the kinesiology department of a large comprehensive university in California. Results indicated that short-term kinesiology study-abroad programs consisted of significantly higher levels of faculty-student and student-student engagement, as well as higher scores on diversity and experiential learning when compared to a domestic course. The authors echo Dunn's (2009) charge which called for the development and promotion of international experiences, such as study abroad opportunities, in order to enhance the understanding and viability of undergraduate and graduate students in the field of kinesiology. To date, this call has been left unanswered.

Keywords: *international, service-learning, student engagement*

Prácticas de Alto Impacto (HIP) en Programas de Kinesiología y Educación Física, Domésticos y en el Extranjero

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La investigación muestra que los programas de estudio en el extranjero pueden beneficiar a los estudiantes de diversas maneras, incluyendo: el fomento de la comprensión intercultural, la mejora de la finalización de los programas de grado, la retención, las tasas de transferencia de la universidad comunitaria, así como el aumento de GPA. El propósito de este estudio fue evaluar la participación en prácticas de alto impacto en estudiantes universitarios (N=70) a través de programas de aprendizaje en servicio internacional, aprendizaje en servicio nacional y estudios en el extranjero ofrecidos por el departamento de kinesiólogía de una universidad de gran tamaño en California. Los resultados indicaron que los programas de corta duración de estudio en el extranjero de kinesiólogía consistían en niveles significativamente más altos de compromiso entre profesorado y estudiantes y entre estudiantes entre ellos, así como puntuaciones más altas en diversidad y aprendizaje experiencial en comparación con un curso nacional. Los autores se hacen eco del reproche de Dunn (2009), que pedía el desarrollo y promoción de experiencias internacionales, como oportunidades de estudio en el extranjero, con el fin de mejorar la comprensión y la viabilidad de los estudiantes de grado y posgrado en el campo de la kinesiólogía. Hasta la fecha, este llamamiento ha quedado sin respuesta.

Palabras clave: *internacional, aprendizaje en servicio, compromiso estudiantil*

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Impactful learning experiences in college can have a significant impact on student success. Kuh (2008) generally characterized these high-impact practices (HIPs) as experiences that promote achievement of deep learning, significant engagement, and positive differential impact on historically underserved student populations. High-impact practices (HIPs) have been adopted across many American universities and endorsed by organizations focused on higher education such as the Association of American Colleges and Universities. Best practices recommend undergraduate students engage in at least two high impact activities during their academic career, one during their first year and one while engaged in their major coursework (Gonyea et al., 2008). HIPs, therefore, are an approach that must be applied to curriculum across the undergraduate experience. These HIPs have been found, in a longitudinal study, to have broad-reaching positive effects across several learning outcomes set for university students, which include critical thinking and intercultural effectiveness (Kilgo et al., 2015).

Kuh and O'Donnell (2013) indicate that HIPs share eight key elements: (a) performance expectations set at appropriately high levels; (b) significant investment of time and effort by students over an extended period of time; (c) Interactions with faculty and peers about substantive matters; (d) experiences with diversity, wherein students are exposed to and must contend with people and circumstances that differ from those which students are familiar; (e) frequent, timely, and constructive feedback; (f) Periodic, structured opportunities to reflect and integrate learning; (g) opportunities to discover relevance of learning through real-world applications; (h) public demonstration of competence. Several types of programs are generally understood to share these eight key elements. Examples of these programs identified by Kuh (2008) include: (a) first-year seminar/experience, (b) learning communities, (c) writing intensive courses, (d) undergraduate research, (e) collaborative assignments and projects, (f) diversity and global learning, (g) service-learning and community-based learning, (h) internships and (i) capstone courses or projects. As we discuss later in the methods section, our focus was (f) diversity and global learning approaches, and (g) service-learning and community-based learning approaches.

Some research, however, has suggested some limits to the benefits of HIPs. A large study by Johnson and Stage (2018), examined 101 participating institutions and found that although HIPs were widely adopted, they had limited relationships with four-year and six-year graduation rates. More specifically, eight of the ten HIPs listed above showed no significant relationship to four-year or six-year graduation rates. Johnson and Stage (2018) noted that while there have been positive relationships between academic outcomes, student learning, and HIPs in past research, their research did not find connections to graduation rates. This is problematic as many institutions advocating for HIPs do so as a tool to speed up time to completion of degree. It is noteworthy that Johnson and Stage (2018) did not examine how impactful were the experiences of the students who took part in these programs. In the present study, we examined the impact of three different programs offered by the kinesiology department of a large comprehensive university in Southern California. Specifically, we examined the impact of a service-learning program, that aligned with Kuh's definition of service-learning and community-based learning programs. More specifically, we examined a study abroad program that utilized service-learning, which aligned with Kuh's definition of diversity and global learning programs. The benefits of such types of programs are described below.

Study Abroad

Independent research states that study abroad programs positively impact academic and professional measures for university students (Association of International Educators, 2018). Evidence also has shown that participation in study abroad programming improved completion of degree programs, retention, and community college transfer rates as well as increasing grade point averages (GPA) when compared to students who did not study abroad (Sutton & Rubin, 2004; California Community College Student Outcomes Abroad Research Project, 2018). The previously mentioned improvements were even more pronounced for minority and at-risk students. Research also has shown that study abroad helped foster intercultural understanding and provided a global context from which students benefitted (Stebbleton et al.,

2013). Knowledge and skills developed from study abroad programs can possibly increase employability and career skills for students who participate in them (Crossman & Clarke, 2010).

According to the Institute of International Education and its Open Doors database, 347,099 students studied abroad in 2018-19 (Institute of International Education, 2020a). Not all study abroad programs have students traveling abroad for a semester or a year at a time. Short-term study abroad programs can be a viable option for many students who are unable to commit the time or finances to longer-term programs and choose to travel during winter, summer or spring breaks from school. They are also convenient options for students with more regimented curriculum pathways, higher unit loads, or stricter licensing and credential requirements. Spencer and Tuma (2002) define short-term study abroad as a program between one to eight weeks. These programs can be taught and facilitated by either host-country nationals at the study abroad destination or instructors from the students' home institution. Studies have shown that short-term study abroad programs can have sustainable impacts on students' global engagement, and intercultural learning, gains (Nam, 2011; Paige et al., 2010; Pedersen, 2009). The Institute of International Education states that in 2018-19 short-term study abroad programs (summer, or eight weeks or less) were the most popular choices, accounting for 64.9% of all study abroad students, whereas mid-length (one semester or one to two quarters) accounted for 32.9% and long term (a full academic year) only accounted for 2.2% (Institute of International Education, 2020b). This paper will largely focus on the effects of short-term study abroad programs.

Study Abroad in a Kinesiology Context

Compared to modern languages or humanities-based study abroad, little research has focused on study abroad programs in kinesiology or physical education. Through an extensive search of literature, we found only a single piece of peer reviewed, published literature that had studied the effects of study abroad in physical education programs (Ward et al., 2017). Other scholars have evaluated students' experiences of a study abroad program in sport studies, although the vast majority of students were not from the field of kinesiology (Light & Georgakis, 2008).

Interestingly, Dunn (2009) posed a question to the field of kinesiology nearly a decade ago: "Have we as a profession committed ourselves to developing and promoting international experiences, such as study abroad opportunities, that will enhance the understanding and viability of our undergraduate and graduate students" (p. 271). Dunn went on to challenge the field:

The world is changing and the impacts are dramatic. How can we ensure that our students are ready for a globally competitive world? This includes attention to the internationalization of our curriculum, out-of-country experiences for students, and making certain that our campuses continue to be open to students and faculty from throughout the world. (p 272)

Judging by the almost decade that has passed since Dunn questioned the international focus of the field of kinesiology and the lack of research on this topic, we would argue that kinesiology has indeed not risen to the challenge; even though, as a field, we are internationally based and are represented in countless countries, international conferences, and peer reviewed journals that span the globe. However, we want to focus on the lack of out-of-country experiences for students that Dunn refers to. Even if kinesiology programs are offering more study abroad programs, the dearth of literature indicates that the profession has yet to evaluate or disseminate what makes an effective study abroad program in kinesiology.

Service-Learning

Service-learning has been defined as a "form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development" (Jacoby, 1996, p. 5). Service-learning provides students with opportunities to serve local communities in need (Bringle & Hatcher, 2000) while helping students gain cultural competencies (Domangue & Carson, 2008). This practice can take many forms in higher education.

Often in physical education settings, service-learning occurs during a field experience, which is typically a part of a class in which students learn how to teach physical education to youth.

Carson and Raguse (2014) recently conducted an in-depth systematic review of service-learning in kinesiology which offered a valuable resource to understand the nature of service-learning in the field. The authors found 42 peer-reviewed publications and categorized these by research, program overview, and implementation strategy papers. Their findings suggested a meaningful impact of service-learning on undergraduate students and highlighted several successful programs that could be adopted in kinesiology programs across the nation. Cervantes and Meaney (2013) also offered a useful review of service-learning literature in physical education teacher education (PETE) programs that highlighted the strengthened relationship between the university and community through participation in service-learning. Both studies illustrate service-learning's important place in kinesiology curriculum.

International Service-Learning.

Although research on service-learning in kinesiology programs has increased (Carson & Raguse, 2014; Cervantes & Meaney, 2013), less is known about international service learning (ISL) in the field. The ISL approach brings a service-learning component to study abroad curriculum, with the aims of providing participants with a broader appreciation of the host country, obtaining a richer understanding of global issues, and understanding themselves as citizens, both locally and globally (Bringle et al., 2011). ISL can be a rich, meaningful learning experience for students even if it sometimes can be challenging, messy, and filled with complexities (Whitaker & Bathum, 2014). Indeed, ISL can be a vehicle to help students manage uncertainty, make sense of their lived experiences, and engage in transformative learning outcomes (Larson & Fay, 2016). Recently, however, there has also been discussion about the effects ISL has on the community where students travel to and what the community gains from hosting students during ISL (Chapa-Cortés, 2019).

Purpose

The benefits of study abroad and service-learning programs are well described in the literature. However, comparing these benefits across the various programs has been difficult due to the myriad approaches study-abroad programs take. Kuh (2008) offers an approach that might be helpful in discussing the benefits of different practices believed to be high-impact. The purpose of this study was to compare the impact of different kinesiology undergraduate programs through a high-impact practice lens. Specifically, we examined how impactful a study abroad, a service-learning, and an international service-learning program was to participants. The international service-learning program was included to see if the benefits of study abroad and service-learning programs could be additive.

We specifically aimed to answer the following research question: what are the effects of different high-impact practices through a kinesiology program (study abroad, service-learning, and international service-learning) on student engagement (as indicated by scores on the CSUF High Impact Practice Student Experience Survey) (Clem et al., 2014)? We hypothesized that international service-learning would have the highest student engagement outcomes followed by service-learning programs based on the inherent additional engagement these courses can provide. Results could be helpful in the creation of curricular experiences for kinesiology majors.

Methods

We compared the experiences of students who participated in three different high-impact practice programs offered by the kinesiology department of a large comprehensive university in Southern California. Specifically, we compared a study abroad program, which is aligned with Kuh's Diversity/Global Learning category; a service-learning program, which is aligned with Kuh's Service-Learning/Community-Based Learning category; and an international service-learning program which combines the two categories

mentioned earlier (Diversity/Global Learning and Service-Learning/Community-Based Learning). The three programs are described below.

Greece Program (Diversity/Global Learning)

The Greece program aimed to increase participants' knowledge about the history and philosophy of the Olympic Games as well as broader cultural aspects of sport and physical activity. In this short-term faculty-led study abroad program in the summer of 2017, 26 kinesiology students traveled to Greece for approximately two weeks accompanied by two kinesiology faculty members. While in Greece, participants visited archeological sites and museums, attended lectures, and completed course-related activities (e.g., readings, reflections, quizzes). Participants stayed in a combination of hotels and dorm-like student accommodations when at the International Olympic Academy. Participating students completed 6 courses consisting of one course on Olympic history and the other on sport history, all completed within the allotted two-weeks. In all courses, students were required to link experiences in Greece with students' experiences in the United States as a way to promote Diversity/Global Learning. This program did not include a service-learning component.

Movement and the Adolescent (MATA) Program (Service-Learning/Community-Based Learning)

The Movement and the Adolescent (MATA) program aimed to increase students' pedagogical skills for teaching physical education at the secondary level. Twenty-four kinesiology students were enrolled in three units of coursework in fall of 2017. The course consisted of a split five-week component at the university campus and a nine-week service-learning component at a secondary school in Southern California. The school was socio-economically diverse and had a diverse racial/ethnic student body and was classified as Title I (a governmental designation in US schools as low-income). At the university, students and faculty discussed effective and appropriate teaching and lesson planning, school climate, culturally-responsive pedagogy, and norms and behaviors for visitors on public school campuses. Students worked in groups of four to develop lesson plans that they co-taught to high school students in physical education classes in the local school during the service-learning component. The students worked together to find resources for planning effective lessons while incorporating guidance from the instructor. After implementing a lesson plan, students reflected on their teaching and received feedback from peers and faculty.

Brazil Program (International Service-Learning)

The Brazil study abroad program aimed to increase students' ability to teach movement skills across cultures. This program contained elements of both Diversity/Global Learning, as a study abroad program, and service-learning, as students interacted directly with the community to meet their needs (i.e. International Service-Learning). In this short-term faculty-led international service-learning program, 20 kinesiology students traveled to Rio de Janeiro in Brazil for approximately two weeks accompanied by two kinesiology faculty members. The program took place in the summer of 2017. While in Brazil, participants developed and implemented lesson plans during physical education classes at a high school in Rio de Janeiro, participated in community outreach initiatives, and completed course-related activities (e.g., readings, reflections, quizzes) for university classes. Participating students completed six units of coursework, and all but two days of coursework were completed in Brazil. Participants stayed in dorm-like student accommodations and shared meals and social activities with students at Escola SESC de Ensino Medio (SESC high school), where all the activities were conducted. SESC high school is a residential learning community that provides education and room and board to approximately 500 students from all 26 Brazilian states free of charge. Students at the school come from families with low socio-economic status.

Participants

Each program offered limited spots and required applications from prospective students already enrolled at the university. As a large comprehensive public university designated by the United States Department of Education as a Hispanic Serving Institution (HSI), the university serves approximately 38,000 students with 40.8% of the students self-identified as Hispanic, 20.5% self-identified as Asian, 20.4% as White, 2% as Black, and 7.8% were international students in the fall of 2017. Participants were declared kinesiology majors and met specific criteria for each program. Amongst other criteria, selection criteria for the Greece program emphasized desire for international learning, selection criteria for the Movement and the Adolescent (MATA) gave preference to kinesiology students who had declared the Physical Education Teacher Education concentration in the major, and criteria for participation in the Brazil program emphasized professional experience/interest in coaching/physical education. Combined, 70 students participated in either the Greece ($n=26$), the MATA ($n=24$), or the Brazil ($n=20$) programs and thus were purposefully selected to participate in this study. All 70 students volunteered to participate in the study, which involved signing the informed consent and completing at least partially, the pre- and post-program questionnaires. All procedures used in the present study were approved by the university's Institutional Review Board prior to the beginning of the study.

Instruments and Procedures

All participants ($n_{\text{Total}} = 70$) completed a demographics questionnaire before starting their respective programs ($n_{\text{Greece}} = 26$, $n_{\text{MATA}} = 24$, $n_{\text{Brazil}} = 20$) programs. Prior to completing the questionnaires, students received instructions on how to complete them. Immediately after their programs, participants completed the CSUF High Impact Practice Student Experience Survey, which was adapted from the National Survey of Student Engagement, the Wabash National Study of Student Experiences, and the Experiential Survey (Clem et al., 2014). The CSUF High Impact Practice Student Experience Survey (HIP) measured student engagement through 21 items assessing (a) meaningful and substantive interactions with faculty (*instructor*); (b) meaningful and substantive interactions with peers (*peers*); (c) frequent and meaningful feedback (*feedback*); (d) considerable time and effort (*effort*); (e) reflective and integrated learning (*reflection*); (f) diversity, complexity, and change (*diversity*); and (g) experiential learning (*experiential learning*). For questions 2, 3, 5, 6, 8, 9, 11, 12, 14, 15, 17, 18, 20, and 21 participants indicated on a 4-point Likert-type scale their level of agreement (1 = completely disagree and 4 = completely agree) to a question. For questions 1, 4, 7, 10, 13, 16, and 19 participants indicated the frequency or amount of time devoted to a particular event. The questions in the CSUF High Impact Practice Student Experience Survey are illustrated in Table 1.

Participants from the Greece program completed the post-program questionnaire, CSUF High Impact Practice Student Experience Survey, online using Qualtrics, as the program ended in Greece and some students did not immediately return to the USA to complete a paper format post-assessment. These participants were emailed a link to the survey. Students were emailed courtesy reminders at one, two, and eight weeks after the initial email was sent. Participants from the Movement and the Adolescent and Brazil programs completed the post-program questionnaire in person during the last day of the program. In total, 66 participants, 94 percent of the population, completed the CSUF High Impact Practice Student Experience Survey questionnaire ($n_{\text{Greece}} = 24$, $n_{\text{MATA}} = 22$, $n_{\text{Brazil}} = 20$).

Statistical Analyses

The primary dependent variables were the mean HIP score, calculated by averaging the points obtained for each of the 21 items in the HIP. To further understand the sources of potential differences between groups, researchers examined individual components of the HIPs instrument. Mean scores were calculated for each component by averaging scores for (a) faculty (questions 1, 2, and 3); (b) peers (questions 4, 5, and 6); (c) feedback (questions 7, 8, and 9); (d) effort (questions 10, 11, and 12); (e) reflection (questions 13, 14, and 15); (f) diversity (questions 16, 17, and 18); and (g) experiential learning (questions 19, 20, and 21).

Table 1
CSUF High Impact Practice Student Experience Survey Components and Questions

Component	Question
(a) meaningful and substantive interactions with faculty (<i>Instructor</i>).	<p>1. How much time, over the entirety of the program, have you spent in meaningful interactions (including class/lab sessions) with the instructor(s)?</p> <p>2. I have had adequate opportunities to interact (including class/lab sessions) with the instructor(s).</p> <p>3. My interactions with the instructor(s) were helpful for my academic or personal growth.</p>
(b) Meaningful and substantive interactions with peers (<i>Peers</i>)	<p>4. How much time, over the entirety of the program, have you spent in meaningful interactions (including class sessions) with classmates?</p> <p>5. I have had adequate opportunities to interact (including class/lab sessions) with fellow student(s).</p> <p>6. My interactions with fellow student(s) were helpful for my academic or personal growth.</p>
(c) Frequent and meaningful feedback (<i>Feedback</i>)	<p>7. How many times, over the entirety of the course, have you received feedback (written or oral) from the instructor(s) on your work/project?</p> <p>8. I have had adequate opportunities to receive feedback from the instructor(s).</p> <p>9. The feedback I received from the instructor(s) was helpful for my academic or personal growth.</p>
(d) Considerable time and effort (<i>Effort</i>)	<p>10. How many hours, in a typical 7-day week, do you spend preparing for this course/project?</p> <p>11. I had to spend a lot of time and effort in order to do well in this course/on this project.</p> <p>12. This course/project challenged me to reach higher academic or personal goals than I thought I could.</p>
(e) Reflective and integrated learning (<i>Reflection</i>).	<p>13. How many times, over the entirety of the course/project, have you worked on an assignment or project that required integrating ideas or information from various sources?</p> <p>14. I have had adequate opportunities to integrate ideas or information from various sources.</p> <p>15. This course/project helped me understand connections between the course material and other courses or real life events.</p>
(f) Diversity, complexity, and change (<i>Diversity</i>).	<p>16. How many times, over the entirety of the course/project, have you worked on a topic or issue that involved unfamiliar or different perspectives (political, social, religious, culture, etc.)?</p> <p>17. I have had adequate opportunities to consider unfamiliar or different perspectives (political, social, religious, culture, etc.).</p> <p>18. This course/project helped me learn how to interact with people who have different views or come from different backgrounds</p>
(g) Experiential learning (<i>Experiential learning</i>).	<p>19. How many times, over the entirety of the course/project, have you worked with real-world problems as part of learning new materials?</p> <p>20. I have had adequate opportunities to work with real-world problems as part of learning new materials.</p> <p>21. This course/project helped me see how I can apply what I learned to real life or a future career.</p>

Differences between the MATA, Greece and Brazil programs regarding mean HIP scores and individual HIP component scores (faculty; peers; feedback; effort; reflection; diversity; and experiential learning) were assessed by separate one-way ANOVAs. When the sphericity assumption was violated, the Greenhouse-Geisser corrected values are reported and partial eta-squared (η^2_{partial}) is reported as an estimate of effect size. Bonferroni post hoc analyses were used when appropriate. Additionally, to investigate how program location (international or domestic) and service-learning components impacted students' mean HIP scores and individual HIP component scores, a series of separate independent-sample *t*-tests were conducted. In all cases, alpha was set at .05.

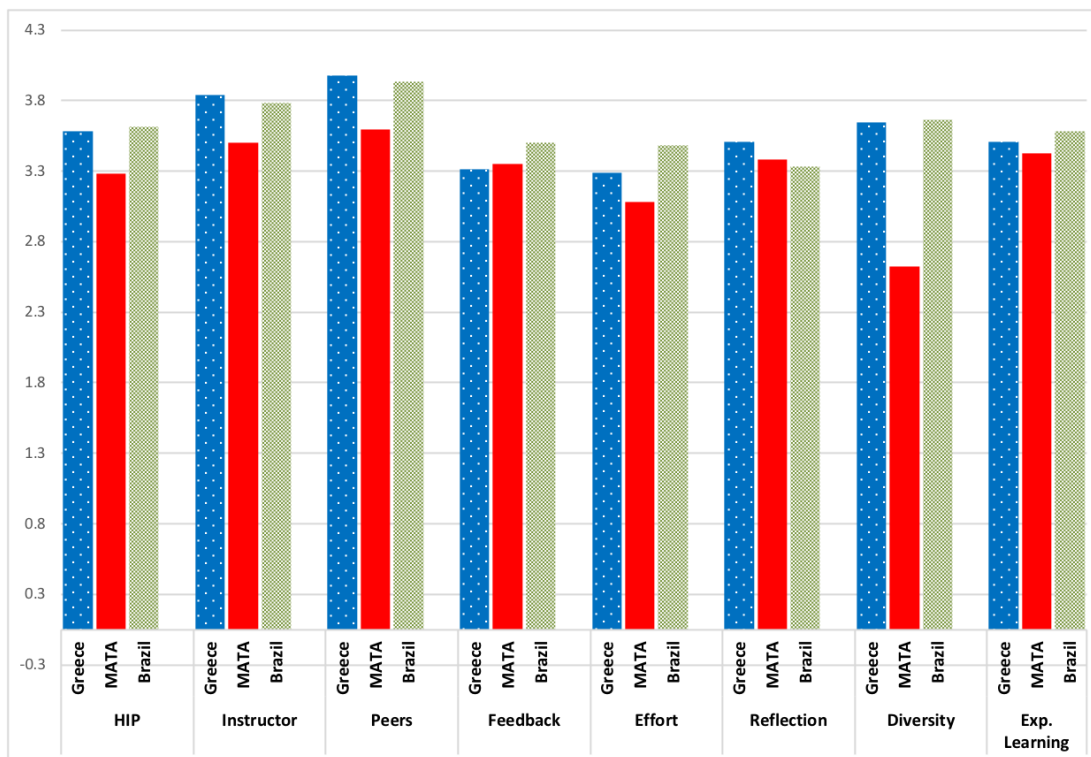
Results

Effect of Program on HIP Scores

Differences between the MATA, Greece, and Brazil programs regarding mean HIP scores and of individual HIP component scores (faculty; peers; feedback; effort; reflection; diversity; and experiential learning) were assessed by separate one-way ANOVAs. The results are displayed in Figure 1.

Figure 1

MATA, Greece, and Brazil, Mean, and Individual Component, HIP Scores



Note. Mean HIP scores (HIP) and individual HIP component scores (Instructor, Peers, Feedback, Effort, Reflection, Diversity, Exp. Learning) for participants in the Greece, Movement and the Adolescent (MATA), and Brazil programs.

A significant difference was identified for mean HIP score, $F(2, 65) = 7.015, p = .002$. *Post hoc* analyses indicated that the MATA program had lower mean HIP score ($HIP_{MATA} = 3.2$) than both the Greece ($HIP_{Greece} = 3.5; p = .007$) and Brazil ($HIP_{Brazil} = 3.6; p = .004$) programs. A significant difference was identified for the *Instructor* component, $F(2, 65) = 3.269, p = .045$. *Post hoc* analyses indicated that participants in the MATA program had lower scores for interaction with the *Instructor* ($Instructor_{MATA} = 3.5$) than participants in the Greece ($Instructor_{Greece} = 3.8; p = .047$) program. A significant difference was identified for the *Peers* component, $F(2, 65) = 8.753, p = .000$. Here, *post hoc* analyses suggested that participants in the MATA program had lower scores for interaction with *Peers* ($Peers_{MATA} = 3.5$) than those in the Greece ($Peers_{Greece} = 3.9; p = .001$) and Brazil ($Peers_{Brazil} = 3.9; p = .005$) programs. A significant difference was identified for *Diversity*, $F(2, 65) = 7.787, p = .000$. *Post hoc* analyses showed that participants in the MATA program had lower scores for experience with *Diversity* ($Diversity_{MATA} = 2.6$) than those in the Greece ($Diversity_{Greece} = 3.6; p = .000$) and Brazil ($Diversity_{Brazil} = 3.6; p = .000$) programs. No significant differences were identified for *Feedback*, $F(2, 65) = .621, p = .541$ ($Feedback_{MATA} = 3.3$, $Feedback_{Greece} = 3.3$, $Feedback_{Brazil} = 3.5$), *Reflection*, $F(2, 65) = .905, p = .410$ ($Reflection_{MATA} = 3.3$, $Reflection_{Greece} = 3.5$, $Reflection_{Brazil} = 3.3$), or *Experiential Learning*, $F(2, 65) = .453, p = .638$ ($Experiential Learning_{MATA} = 3.4$, $Experiential Learning_{Greece} = 3.5$, $Experiential Learning_{Brazil} = 3.5$). For *Effort*, the results were not significant, $F(2, 65) = 2.965, p = .059$ ($Effort_{MATA} = 3.0$, $Effort_{Greece} = 3.2$, $Effort_{Brazil} = 3.4$).

Effect of Location on HIP Scores

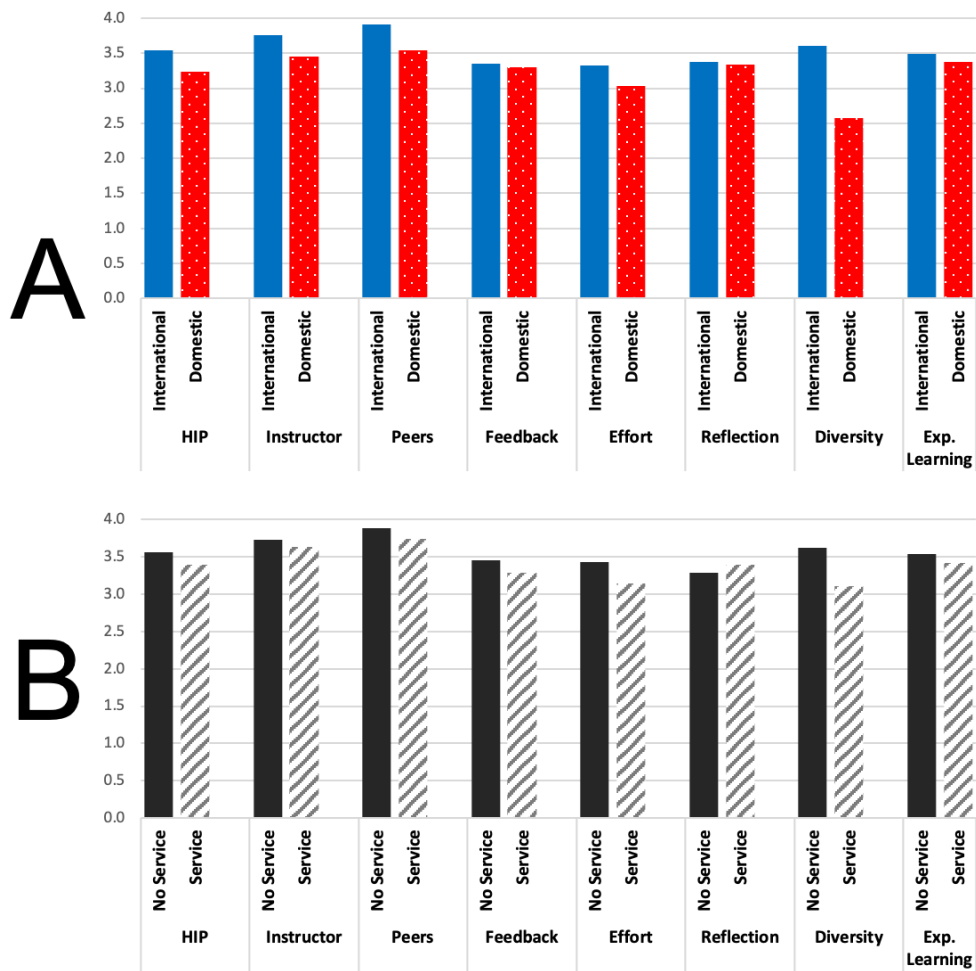
For further insight into how program location (international or domestic) impacted students' mean HIP scores and individual HIP component scores, a series of separate independent-sample *t*-tests were conducted. In regards to location (international and domestic), there was a significant difference in mean HIP scores ($t(31.021) = 3.318, p = .002$; $HIP_{international} = 3.5$; $HIP_{domestic} = 3.2$), and individual HIP component scores for *Instructor* ($t(28.680) = 2.159, p = .039$; $Instructor_{international} = 3.8$, $Instructor_{domestic} = 3.5$), *Peers* ($t(26.047) = 3.379, p = .002$; $Peers_{international} = 3.9$, $Peers_{domestic} = 3.5$), *Effort* ($t(64) = 2.103, p = .039$; $Effort_{international} = 3.3$, $Effort_{domestic} = 3.0$), and *Diversity* ($t(64) = 8.341, p < .001$ ($Diversity_{international} = 3.6$, $Diversity_{domestic} = 2.6$)). In all cases, scores were higher for participants in international programs (Figure 2A). Scores for *Feedback* ($t(64) = 0.303, p = .763$; $Feedback_{international} = 3.3$, $Feedback_{domestic} = 3.3$), *Experiential Learning* ($t(64) = 0.832, p = .408$; $Experiential Learning_{international} = 3.5$, $Experiential Learning_{domestic} = 3.4$), and *Reflection* ($t(64) = 0.386, p = .701$; $Reflection_{international} = 3.4$, $Reflection_{domestic} = 3.3$) did not significantly differ.

Effect of Service Component on HIP scores

For further insight into how the programs' service-learning component (no service or service) impacted students' mean HIP scores and individual HIP component scores, a series of separate independent-sample *t*-tests were conducted. In regard to the service component (no service and service), there was a significant difference in *Effort* ($t(64) = 2.048, p = .045$; $Effort_{no service} = 3.4$, $Effort_{service} = 3.1$) and *Diversity* ($t(59.151) = 3.636, p < .001$; $Diversity_{no service} = 3.6$, $Diversity_{service} = 3.1$). In both cases, participants in the program without the service-learning component had higher scores than the service-learning programs (Figure 2B). Scores for HIP ($t(64) = 1.868, p = .066$; $HIP_{no service} = 3.6$, $HIP_{service} = 3.4$), *Instructor* ($t(64) = 0.786, p = .435$; $Instructor_{no service} = 3.7$, $Instructor_{service} = 3.6$), *Peers* ($t(64) = 1.381, p = .172$; $Peer_{no service} = 3.9$, $Peer_{service} = 3.7$), *Feedback* ($t(64) = 1.098, p = .276$; $Feedback_{no service} = 3.5$, $Feedback_{service} = 3.3$), *Reflection* ($t(64) = -0.959, p = .341$; $Reflection_{no service} = 3.3$, $Reflection_{service} = 3.4$), and *Experiential Learning* ($t(64) = 0.807, p = .423$; $Experiential Learning_{no service} = 3.5$, $Experiential Learning_{service} = 3.4$) did not significantly differ.

Figure 2

International, Domestic, and No-Service, Mean, and Individual Component, HIP Scores



Note. Mean HIP scores and individual HIP component scores for A) participants in international and domestic programs; and B) participants in no-service component and service component programs

Discussion

The purpose of our study was to assess how college students experience high impact practices in three programs (international service-learning, domestic service-learning, and study abroad programs) offered by the kinesiology department of a large comprehensive university in Southern California. The results indicate that all programs were high-impact programs in different ways. This was expected as the available research indicates that service-learning (e.g., Carson & Raguse, 2014; Burch et al., 2019) and study abroad programs (e.g., Varela, 2017; Burrow, 2019) enrich students' experiences. In this case, however, the study abroad programs were more impactful than the domestic service-learning program. The results of our study suggest that even 2 week-long, relatively inexpensive, and short-term study abroad programs can indeed significantly impact students' experiences. This is encouraging because such short-term study abroad

programs appear to be more accessible to students as they seem to address key barriers to participation in international experiences. Preliminary results of an unpublished survey of around 1000 students from the institution in which the programs took place indicate the most preferred duration for study abroad programs was 1-2 weeks. Further, semester-long and year-long programs were the least preferred. Presumably, the preference for short-term study abroad programs occur because of cost/time commitments. Indeed, the same survey indicated that “cost” (86% of respondents), “inability to leave work” for a long duration (56% of respondents), and “family obligations” (26% of respondents) were the most common perceived barriers to participation in study abroad programs. Thus, our results are particularly encouraging since they showed that short and relatively inexpensive study abroad experiences can provide students with an impactful experience that helps them in developing a global perspective during their kinesiology studies.

High Impact Practices

The HIP inventory scores produced by all programs indicates that any of those models can provide students with an impactful undergraduate experience. However, our data suggested some variation in HIP scores worth noting. We found that the mean HIP score for the MATA program was lower than the Greece and Brazil programs. The analyses of the individual HIP components indicated that this difference in mean HIP score was likely affected by differences in specific HIP components. Participants in the MATA program reported lower interactions with their instructor than participants in the Greece program. This may be explained by the fact that students in the MATA program had limited face-to-face interactions with the instructors, meeting only once a week in some cases. In contrast, the study abroad programs provided students with more face-to-face interactions with the instructors during structured and unstructured periods, like during transportation to program locations and meals. There was a logistical limitation on time that the instructor can give to students during a traditional semester as they teach a full load of classes, conduct research and service activities as well as manage personal commitments, whereas during short-term study abroad the instructor can focus on that single class and the students in it. The student also would find it hard to find time to meet when the instructor is available as they are most likely taking a full load of coursework and often working a part time job while balancing all the other aspects of a college student’s life. Study abroad trips, like the Brazil and Greece programs, when led by faculty members, afford a tremendous amount of time for faculty/student interaction by integrating academic settings with transition times while traveling including bus rides, flights, and meals shared as a group. In such instances, this may be the first-time students actually see their professors as “human” thus helping students engage in longer or more meaningful conversations than on campus. Students in study abroad programs also have less access to their usual support network, which likely stimulates increased interaction with peers and faculty.

Another noted difference between programs was perceived interaction with peers. Although all programs involved significant group work, participants in the MATA program reported less peer interaction than those in the Brazil and Greece programs. It is possible that the reduced access to their usual support networks and the condensed nature of the group work during the study abroad programs made participants in those programs perceive the group work required as more significant than participants in the MATA program. Past research on study abroad programs with a service-learning component in physical education, showed that peer support and hands-on experience in teaching was crucial for preservice teacher’s success (Ward et al., 2017). Students also completed almost all travel as a single group or in small groups, which reduced the time they were alone and possibly reduced negative experiences such as homesickness which have been shown to be detrimental to a students’ experience of study abroad (Harrison & Brower, 2011). It is also possible that participants in the Greece and Brazil programs conflated formal (i.e., course-related) and informal (i.e., social/casual) interactions which led to higher scores for interaction with peers for the international program (Greece and Brazil) than the MATA program. This seems to indicate a possible limitation of the CSUF High Impact Practice Student Experience Survey and further analysis could be warranted.

Finally, participants in the MATA program reported lower experience with *Diversity and Experiential Learning* compared to participants in the Brazil and Greece programs. We expected participants in the study

abroad programs to have higher experiences with diversity than participants in the MATA program, given that Brazilian and Greek culture differ considerably from American culture. Further, many of the participants of the MATA program were actually students in the schools or in similar schools that housed the service-learning component of that program. However, since the HIP inventory was designed to accommodate a variety of high-impact educational practices, we speculate that it is possible that a discussion about culture and ways to overcome cultural differences might prime participants in domestic service-learning programs to identify situations where they are confronted with diversity. In both study abroad programs, at least superficially, cultural differences between the US and the host country and ways to navigate those differences were identified in preparation for the programs. This might have contributed to the higher scores observed in those programs. Indeed, research suggests that students who study abroad may be better prepared, due to the personal growth they experience during the study abroad, to succeed in an increasingly diverse world (LeCrom et al., 2018).

A Renewed Call to the Field

Since Dunn's (2009) call to develop and promote international experiences in kinesiology, there is little indication that the field moved significantly to increase the offering and access of such experiences. Although more universities have increased and diversified their study abroad and exchange offerings and more students are participating in those experiences (Open Doors, 2018), kinesiology programs appear to be lagging behind. Perhaps the lack of evidence justifying study abroad programs in kinesiology helps explain the reluctance of some programs to offer them since administrators and gate keepers often request data before allocating funds to support and subsidize these programs. We hope the evidence provided above offers some sense of how study abroad programs can complement kinesiology curricula. And while Dunn asked whether we have committed our field to developing international experiences for our undergraduate and graduate students—a valid question still worthy of reflection—we add: if as a field we are going to be graduating students prepared to be global citizens, can we develop an evidence base that identifies effective study abroad experiences for kinesiology students?

Conclusions and Implications

To summarize, the results of this study indicated that although all three programs investigated were highly impactful, the Greece (study abroad) and Brazil (international service-learning) programs were more impactful than the Movement and the Adolescent (domestic service-learning) program. Further, the international programs (Greece and Brazil) were more impactful than the domestic program (MATA) and the service-learning programs (MATA and Brazil) were less impactful than the programs without service-learning (Greece). The analyses of the individual components of the CSUF HIP Student Experience survey suggests that the formal and informal interactions with peers and instructor, the exposure to the culture of a different country, and the condensed nature of the work likely had an outsized effect, compared to the other components, on participants' engagement as measured by the CSUF HIP Student Experience Survey. Our results indicate that it is possible that students conflate formal and informal interactions with peers and instructors when answering the CSUF HIP Student Experience Survey. Future research is warranted to examine the issue.

Of note, is that relatively short-term study abroad programs resulted in very impactful experiences to students. This is a hopeful answer to Dunn's (2009) call for more access to high-impact experiences through international study abroad programs in kinesiology over a decade ago. The short-term study abroad programs are more accessible (i.e., lower cost, less time away from work and family obligations) than long-term programs and can be rich educational experiences for students.

Although our results suggest that short-term study programs led to a rich educational experience, they are insufficient to suggest that study abroad programs are better than service-learning programs. It is worth noting that all three programs had very high scores in the CSUF HIP Student Experience Survey and that the statistically significant difference in HIP scores might not be practically significant in terms of student success. This is another area that warrants additional research efforts. Further, the decision to include one

type of program or another in curricula should prioritize the mission and goals of each institution. Additionally, the analyses of the individual components of the CSUF HIP Student Experience Survey suggest a path for improvement of the different programs.

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