Undergraduates’ perceived interest and factors affecting participation in selected high-impact experiences

Christopher Bielecki
USDA Foreign Agricultural Service

Gary Wingenbach
Texas A&M University

Taniya Koswatta
Texas A&M University

ABSTRACT

Students can increase their likelihood of academic success if they participate in at least two high-impact experiences during their undergraduate program. High-impact experiences have multiple forms, but whether students choose to participate may depend on perceptions of the high-impact experience structure, intensity, and additive nature to their education. The authors examined students’ levels of interest and factors affecting their participation in selected high-impact experiences. The authors found significant differences in levels of interest for internships and service learning courses when analyzed by gender. Females had significantly higher levels of interest for those high-impact experiences than did males. National levels for participating in service learning high-impact experiences are high, but the authors found low interest levels in service learning high-impact experiences. Low awareness levels of high-impact experiences and/or their benefits indicates that Texas A&M University needs special efforts to increase high-impact experience awareness. The authors propose gender-specific initiatives, especially attuned to males’ needs, to increase participation rates across all types of high-impact experiences.

Keywords: Undergraduates, High-impact Experience, Gender
INTRODUCTION

U.S. public universities continuously seek ways to increase student learning, achievement, and personal development through innovative instructional methods. To achieve this goal, educators use educational methods, which bridge traditional classroom-based instruction with practical hands-on experiences, research, and other outside-the-classroom activities. Part of Texas A&M University’s stated mission is to provide the highest quality undergraduate and graduate programs, which are inseparable from developing new understandings through research and creativity (Texas A&M University, 2017).

The Liberal Education and America’s Promise (LEAP) initiative, sponsored by the Association of American Colleges and Universities (AAC&U), was launched in 2005 to advocate for changing the way universities educate students by redefining “liberal education.” Part of LEAP’s advocacy is to promote high-impact educational practices as a way to increase student retention, engagement, and involvement (AAC&U, n.d.). While opportunities for students to participate in HIEs have long since existed in higher education, it is not until recently that they moved from being marginal or extra-curricular to being integrated into the curriculum. Kuh (2008) argued that to increase student success, students should participate in at least two HIEs during their undergraduate program; one during the first two years and a second in a focused field during the last two years of undergraduate education.

High-impact educational practices take on many forms, depending on learner characteristics and institutional and academic contexts (AAC&U, n.d.). There is no agreed upon definition of what constitutes a high-impact educational practice. Furthermore, several terms are used interchangeably, whether they are high-impact practices (used by faculty, staff, and other campus leaders) or experiences (as perceived by students and participants). For this research, high-impact experiences (HIEs) refer to university-sanctioned educational experiences that purposely increase student engagement, learning, and collaboration. Ten high-impact experiences were identified by the AAC&U’s (n.d.) list of the most common high-impact experiences offered to college students. Those high-impact experiences include (a) first-year seminars and experience; (b) common intellectual experiences; (c) learning communities; (d) writing-intensive courses; (e) collaborative assignments and projects; (f) undergraduate research; (g) diversity/global learning; (h) service learning, community-based learning; (i) internships; and (j) capstone course and projects.

Research exists on the cognitive, social, and social impacts that selected types of high-impact experiences have on students (Foubert & Grainger, 2006; Giles & Eyler, 1994; Kuh, 1995; Miller, Rycek, & Fritson, 2011), but individual motivating factors influencing students’ participation in different types of high-impact experiences are not well understood. For example, significant differences in participation levels, academic gains, etc., when analyzed by gender have been reported for many years (Mulvaney, 2017; Salisbury, Umbach, Paulsen, & Pascarella, 2009; Twombly, 2015; Ullah & Wilson, 2007). Furthermore, gender identity may impact HIE participation (BrckaLorenz, Garvey, Hurtado, & Latopolski, 2017, p. 3). Salisbury et al. found gender played a major role in shaping decisions to participate in study abroad program (Salisbury, Paulsen, & Pascarella, 2010). Eccles (1994) identified social and psychological factors that affect the educational, vocational, and other achievement-related choices of women and men. Eccles found, “assimilation of the culturally defined gender role schema can have such a powerful effect on one’s view of the world that activities classified as part of the other gender’s
role are rejected, often nonconsciously, without any serious evaluation or consideration” (p. 590).

The authors examined students’ levels of interest and factors affecting their participation in selected high-impact experiences, such as (a) internships; (b) collaborative learning communities; (c) research intensive courses; (d) international study abroad or domestic study away courses; (e) service learning courses; and (f) intensive writing courses. Demographic data were collected to understand if factors and motivations were influenced by these data. The authors hypothesized that differences existed in the factors that motivated students to participate in different types of high-impact experiences. Understanding the effect these different factors have on students’ participation in high-impact experiences can help administrators and staff better meet students’ needs, which may increase participation in high-impact experiences.

**Literature Review**

The rationale that high-impact experiences positively affect university students can be traced back to John Dewey’s (1938) philosophy of experiential education. Dewey argued that experience and education are linked and that students’ experiences should remain central to any educational experience. Kolb’s (1984) defined experiential learning as “the process whereby knowledge is created through the transformation of experience” (p. 38). Learning can be seen as a continuous holistic process, grounded in transactional experiences between the person and the environment (Kolb, 1984). Kolb’s (1984) model described experiential learning as a continual cycle whereby active experimentation led to forming concrete experiences. These concrete experiences are then absorbed through reflective observation, and the learner conceptualizes and applies his/her experiences to new situations, problems, or environments.

Kuh (2008) argued that high-impact educational practices take many forms, but they can be identified by six characteristics: they are effortful; help students build substantial relationships; help students experience diverse people, circumstances, and places; provide students with meaningful feedback; help students apply what they have learned in new situations; and, provide opportunities to reflect on the experience. HIEs are designed to provide learners with all elements of Kolb’s (1984) experiential learning model, including experimentation, reflection, feedback, and concrete “real-world” experiences. The following HIEs are the most common forms at Texas A&M University, which are the subject of this research.

There is no standard definition for what constitutes a high-impact internship for undergraduate students, nor is there agreement on how to measure quality. The Council for Advancement Standards in Higher Education published internship standards in its Professional Standards for Higher Education (2012). These internship standards note that internships should be framed and developed as learning experiences for students. Internship experiences should include receiving feedback and engaging in reflective activities which tie together contributions to curricular learning outcomes. The AAC&U (n.d.) argued that internships should not merely be “add-ons” to course work, but be intentionally used to apply knowledge and test new assumptions, questions, or actions. To ensure internships are high-impact experiences, faculty, administrators, and those hosting interns should agree on connecting learning, contributions, and career development for students (O’Neill, 2010).

Collaborative learning communities bring students together to work on a shared mission, goals, or activities for learning. One of the hallmarks of a collaborative learning community is

Undergraduates’ perceived interest
the dialogue and interaction between students. Dialogue during an educational activity has been shown to increase deep learning and information retention (Van der Linden & Renshaw, 2001). Collaborative learning communities can take many forms, but usually are formed on the basis that students share a number of classes or extra-curricular activities. According to Lenning and Ebbers (1999), collaborative learning communities usually take one (or a combination) of four forms: (a) students are co-enrolled in two or more courses that are linked by a common theme; (b) students are enrolled in one course that might combine two or more disciplines and faculty; (c) students are grouped according in shared residential communities and are encouraged to work on coursework together; and (d) specific learning groups formed according to demographic characteristics, such as historically underrepresented students or those with disabilities.

Undergraduate research can be defined as including scientific inquiry, creative activities, and scholarship that include producing an original work through close faculty mentorship (Kinkead, 2003). Depending on the academic discipline, undergraduate research could result in an analysis of documents, scientific data collection and analysis, or the creation of a work of art. Faculty-led undergraduate research has been shown to increase student retention and improvement in cognitive and professional development (Nagda, Gregerman, Jonides, Von Hippel, & Lerner, 1998; Russel, Hancock, & McCullough, 2007).

Many universities emphasize creating educational programs that allow students to achieve learning through their experience with different cultures, ways of life, and worldviews (AAC&U, n.d.). These programs frequently take the form of international study abroad or domestic study away trips that place students in a different community to augment intercultural communication. Study trips vary in form and duration, however to be considered high-impact, study trips should implement faculty-guided reflection, and integrate service learning, volunteering, or work duties into learning outcomes (Stebelton, Soria, & Cherney, 2013). Study trips can enhance students’ learning outcomes, provide opportunities to conduct research, and increase cross-cultural sensitivity (Anderson, Lawton, Rexeisen, & Hubbard, 2006).

Service learning, which is also referred to as course-based service, entails achieving a course’s learning outcomes through service to an organization (or to the community at large). While service learning may share similar characteristics with an internship (and may sometimes be indistinguishable from an internship), service learning is different from internships in that it focuses on work typically performed by nonprofit organizations engaged in providing food to needy citizens, community or environmental beautification, or civic education. Service learning has been shown to impact academic performance, self-efficacy, and leadership skills (Astin, Volgelgesang, Ikeda, & Yee, 2000; Jones & Abes, 2004).

Courses or other faculty-led academic programs can use writing to encourage creative, innovative, and research-based thinking, questioning, and reflection that engage different audiences and disciplines. Writing as a high-impact practice should emphasize writing “across the curriculum,” which connects the writing product(s) to parallel efforts in oral communication, ethical inquiry, marketing, or quantitative reasoning (AAC&U, n.d.).

**Conceptual Framework**

Systematically promoting high-impact experiences within undergraduate curricula is a relatively new phenomenon in U.S. higher education. While considerable research exists on the impacts that high-impact experiences have on student success, graduation, retention, grade point averages, employability and other impacts, little is known why students choose (or do not
choose) to participate in high-impact experiences. Student participation is a multidimensional construct that includes enrollment in a high-impact experience, and qualitative elements such as student gains (professionally academically, cognitively, and personally) from the experience, whether the student enriched the experience for others, and whether they contributed to an external audience (such as through engaging in community service or producing research).

Although there are ten types of high-impact experiences, the majority of research examining barriers to participation in them has been conducted on study abroad programs. Research on post-secondary study abroad programs found students were concerned about affordability and time commitments; chiefly, students’ participation decreased when it was perceived as long-term and cost prohibitive (Chang et al., 2013; Irani, Place, & Friedel, 2006). Salisbury et al. (2009) argued that higher education institutions should broaden their focus beyond ameliorating the direct costs of participating in study abroad, and work to build interest and intent among students. Salisbury et al. found that the social and cultural capital students accumulated before enrolling in college determined study abroad participation more so than did the financial burden of participating in a study abroad program.

The purpose of the current research was to examine students’ perceived levels of interest and factors affecting their motivations to participate in selected high-impact experiences offered at Texas A&M University. McNair and Albertine (2012) argued that higher educational institutions “need to be intentional in the design, implementation, and scaling of high-impact experiences [HIEs]” (para 5). The authors believed that before high-impact experiences are implemented, an assessment of student subgroups should be conducted to better understand which high-impact experiences should be offered and promoted to match students’ needs with opportunities to participate in high-impact experiences. This research examined students’ perceived levels of interest and factors affecting their participation in high-impact experiences when analyzed by gender and ethnicity.

METHODS

Survey research design was used to answer the purpose of this study. Survey research designs are often used to assess the outcomes or impacts of a given program or project on its participants (Fraenkel & Wallen, 2009). Approval to conduct this research was obtained from the Texas A&M University Institutional Review Board.

The researchers used stratified random sampling to ensure the sample was representative of the population, which included students with different years of expected graduation. The target population (N = 431) included all undergraduates enrolled in a recent fall semester in the Department of Agricultural Leadership, Education, and Communications. Four departmental classes were randomly selected for this research. The population included students from several majors and classifications. A sample (n = 165) was calculated on the basis of an 80/20 split with a 5% sampling error at a 95% confidence level (Salant & Dillman, 1994). Simple random sampling was used to increase the likelihood of representativeness of the sample to the target population (Fraenkel & Wallen, 2009).

This study used an instrument measuring students’ history of participation in six selected high-impact experience categories, their level of interest and likelihood of participation, and the level of importance that 10 factors, identified in previous studies (Black, Moore, Wingenbach, & Rutherford, 2013; Chang et al., 2013; Irani et al., 2006), had in determining whether they would participate during their collegiate experience. Additionally, participants were asked to indicate
the relative amount of HIE activities by category that should be offered at their university. Demographic data (gender and ethnicity) were collected from each participant.

Students’ levels of interest for participating in each of the six high-impact experiences were measured with a four-point Likert-type scale (i.e., similar to Chang et al., 2013), which ranged from not interested to definitely interested. Participants’ likelihood of participating in each of six high-impact experiences was measured using a five-point Likert-type scale, consistent with the scales in Briers, Shinn, and Nguyen (2010) and Irani et al. (2006), which ranged from definitely not likely to definitely likely. The level of importance that 10 factors had in determining respondents’ participation in high-impact experiences was measured with a five-point Likert-type scale (i.e., similar to Briers et al., 2010, and Chang et al., 2013), which ranged from not important to very important. Finally, participants reported which high-impact experiences should be offered more frequently at their university using a four-point Likert-type scale (i.e., similar to Briers et al., 2010, and Chang et al., 2013), which ranged from the same to much more.

A pilot test of the instrument was conducted three months prior to data collection. Pilot test data were used to measure internal reliability for instrument scales using (Cronbach, 1951). Reliability for the scales were: levels of interest for participating in high-impact experiences (α = .82), likelihood to participate in high-impact experiences (α = .81), and importance of factors in determining high-impact experience participation (α = .87). Instrument scales in this study provided reliable data for analyses and interpretation.

Data were collected with an online questionnaire. A personalized pre-notice e-mail was sent to students two days before the survey (Dillman et al., 2009). Follow-up reminders were sent to non-respondents every three days after the initial distribution for three weeks (Ladner et al., 2002). A response rate of 37% (n = 61) was achieved after repeated non-respondent follow-ups (Dillman, 2007). The small sample is recognized as a limitation of the study.

Data were analyzed using descriptive statistics. Analysis of variance (ANOVA) was conducted to determine if significant differences existed between sample groups. ANOVA data were analyzed at the .05 level.

RESULTS

Respondents indicated their levels of interest for six selected high-impact experiences as seen in Table 1 (Appendix). Participants reported highest levels of interest (i.e., interested) to participate in four of six selected HIEs. Those four included (a) international study abroad or domestic study away programs (M = 3.02, SD = .98); (b) internships (M = 3.00, SD = 1.03); (c) service learning courses (M = 2.70, SD = .93); and, (d) intensive writing courses (M = 2.61, SD = 1.07). Respondents were slightly interested in the other two high-impact experiences, which were collaborative learning communities (M = 2.46, SD = .98), and undergraduate research courses (M = 2.43, SD = 1.01).

Respondents indicated their likelihood to participate in the six selected high-impact experiences as reported in Table 2 (Appendix). Respondents were probably likely to participate in two of the six high-impact experiences. Those two were internships (M = 3.61, SD = 1.35), and intensive writing courses (M = 3.57, SD = 1.27). Participants reported that they didn’t know (M = 2.61-3.40) about the likelihood of participating in the other four high-impact experiences (i.e., international study abroad or domestic study away, undergraduate research courses, service learning courses, and/or collaborative learning communities).
Respondents rated the importance of 10 factors in determining their participation in high-impact experiences, as seen in Table 3 (Appendix). No factors were considered as very important ($M = 4.21-5.00$). However, eight factors were rated as important ($M = 3.41-4.20$) in determining participation in high-impact experiences. Those eight factors included (a) monetary costs, (b) time required, (c) future employability, (d) need for new experiences, (e) to learn something new, (f) advice from university personnel, (g) connection to academic studies, and (h) exposure to other cultures or diverse people. Advice from friends and advice from family were two factors rated as slightly important in determining participation in high-impact experiences.

Respondents reported their perceptions about the six types of high-impact experiences their university should offer more often, as seen in Table 4 (Appendix). Internships ($M = 2.87, SD = 1.10$) and international study abroad or domestic study away ($M = 2.59, SD = 1.07$) were rated highest, as somewhat more often; the other four high-impact experiences were all rated as offering the same ($M = 1.76-2.50$) amount as currently existed in the university setting.

Analysis of variance (ANOVA) was conducted to test for significant differences in respondents’ levels of interest for high-impact experiences when analyzed by gender and ethnicity, as seen in Table 5 (Appendix). Significant differences were found in levels of interest for internships and service learning courses, when analyzed by gender. Females had significantly higher interest levels for both types of high-impact experiences than did males, as has been found elsewhere (NSSE, n.d.). No significant differences were found in levels of interest for participating in high-impact experiences when analyzed by ethnicity. Significance tests were conducted on other constructs (i.e., likelihood of participating in high-impact experiences, and importance of factors in determining high-impact experience participation during college), however no significant differences were found between those constructs when analyzed by gender or ethnicity.

**DISCUSSION**

The present study provides a number of important facts that should be considered when promoting participation of university-based high-impact experiences. First, the authors found female students held higher interest levels for internships and service learning courses, than did males. Second, although others (Astin, Volgelgesang, Ikeda, & Yee, 2000; Jones & Abes, 2004) reported high levels of participation in service learning activities nationally, interest to participate in such courses was lower in this study. Third, the majority of responses for likelihood to participate in high-impact experiences were in the “Don’t know category,” which may indicate a necessity for increasing awareness of high-impact experience activities and their benefits.

A study at Boise State University found differences in high-impact experience participation based on students’ demographics (Boise State University, n.d.). The NSSE 2016 High-Impact Practices (NSSE, n.d.) also reported senior females had high levels of participation in internships, study abroad, service learning, and learning communities. In addition, females’ participation in study abroad has outnumbered males’ participation for years (Mulvaney, 2017), increasing to nearly a 2:1 ratio since 2005 (Salisbury et al., 2009). Participation effects in high-impact experiences vary based on gender (BrckaLorenz et al., 2017). Adaptation to new cultures in study abroad programs differs for men and women (Twombly, 2015). For example, peer-to-peer relationships produced positive effects on academic achievement for women, but negative effects for men (Ullah & Wilson, 2007).
Among the factors considered for student’s participation in HIEs, advice from family scored lowest. Although family advice may not be a primary factor, monetary support received from the family (especially parents) might have a closer relationship. Doyle et al. (2010) noted in their study that one third of participants believed family support would include monetary support. Eccles et al. (1993) found parents tended to provide more opportunities for girls to read and interact socially with their peers, and for boys to do sports and computing. We speculate that females more easily requested and received parental support, than did males, to participate in HIEs, which also included social interaction.

In this study, females had high interest levels for internships. However, other studies found males preferred career-related opportunities such as internships over study abroad programs (Salisbury et al., 2010; Tompkins, Cook, Miller, & LePeau, 2017). The authors suggest promoting HIEs with gender-specific strategies, considering that male and female interests differ (Eccles, 1994; Hyde, 2014). Eccles (1994) noted that men believed having a successful career fulfilled their male gender roles. We believe perceived gender roles may be a limiting or prohibiting factor for male participation in high-impact experiences. Study abroad programs could attract more males by promoting career competency skills gained through study abroad programs at Texas A&M University. Further research is needed to understand how gender affects participation in different high-impact experiences.

The NSSE 2016 High-Impact Practices’ report indicated that both freshmen and seniors had highest participation percentages in service learning activities (NSSE, n.d.). However, respondents in this study were only slightly interested in service learning. Miller et al. (2011) found that undergraduate research and internships were more intrinsically interesting to students than were service learning and/or learning communities. Furthermore, Miller et al. (2011) stated that “to make service learning or learning communities more effective, they should be designed to appeal more to the intrinsic interests of the students” (p. 58). The authors noted the warnings of Finley and McNair (2013) that service learning experience requires more effort to create high quality, high-impact experiences. Texas A&M University needs to investigate factors, especially students’ intrinsic interests, that affect interest levels in service learning to change future participation rates.

According to Kilgo, Ezell Sheets, and Pascarella (2015), compared with other high-impact experience (e.g., study abroad, internship, service learning, and capstone course/experience activities), collaborative learning communities and undergraduate research have broad-reaching positive effects for critical thinking, need for cognition, and intercultural effectiveness. However, this study showed undergraduate research courses and collaborative learning communities received the lowest interest ratings (slightly interested) relative to other high-impact experiences (interested). It could be that respondents were unaware of the positive effects of collaborative learning communities. Collaborative learning communities are frequently designed to improve retention and graduation rates among traditionally underprivileged groups (e.g. minorities), freshman, and among students enrolled in STEM (Science, Technology, Engineering, and Mathematics) fields.

Respondents reported that intensive writing courses should be offered the least, relative to the other five high-impact experiences. However, respondents also noted that intensive writing courses were the second most likely high-impact experience (behind internships) in which they would participate. Respondents were “slightly interested” in participating in an intensive writing course. The difference between the likelihood to participate and respondents’ interest may be explained by the fact that most students anticipated (e.g. likely) taking a course that required
intensive writing. The Department of Agricultural Leadership, Education, and Communications offers several such courses, which require substantial writing and development of communication skills. Therefore, even though students had limited interest in participating in an intensive writing high-impact experience, they still reported being likely to participate in it.

In this study, a majority of responses for likelihood to participate in a high-impact experience were in the “don’t know category.” This result may be explained by unaware students, or those not willing to devote time and energy to high-impact experience activities. Eccles (1994) identified that many educational and vocational options were not considered because individuals were unaware of their existence. Two critical factors help promote student engagement in learning: what students do during college, and what institutions do to facilitate learning and development (Wawrzynski & Baldwin, 2014). It may be challenging to change students’ minds about high-impact experiences, but universities can build awareness and create environments that promote them. The authors suggest that Texas A&M University high-impact experience program planners explain high-impact experience practices more fully to students (Finley & McNair, 2013), as well as the importance of high-impact experience engagement, and how students seek high-impact experience opportunities (Wawrzynski & Baldwin, 2014). Wawrzynski and Baldwin (2014) explained that mapping the collegiate learning environment, showing where learning takes place, relationships between high-impact experiences, undergraduate studies, and their outcomes, may promote student learning and development. For maximum outcome, the mapping process should be a collaborative effort engaging student affairs professionals, faculty members, and students (Wawrzynski & Baldwin, 2014). Assessment and analysis of students’ academic and developmental needs from specific high-impact experience types can increase chances of achieving significant impacts from those high-impact experiences (McNair & Albertine, 2012).

Respondents reported that money, time, future employability, need for new experiences, to learn something new, university personnel advice, connection to academic studies, and exposure to other cultures or diverse people were important factors affecting their consideration of participation in high-impact experiences. These findings confirm similar findings of Chang et al. (2013), who studied factors prohibiting students from participating international education experience programs. Finley and McNair (2013) identified limited time and money, and competing priorities and inadequate social support networks, as factors affecting HIE participation. Although Finley and McNair’s study indicated social support networks was an important factor, this study found that advice from friends and parents were slightly important factors affecting high-impact experience participation. In a more specific high-impact experience example, Salisbury et al. (2009) found students’ social and cultural capital prior to college determined their study abroad participation more so than did cost. Therefore, Texas A&M University high-impact experience program planners could broaden discussions of study abroad benefits gained to promote participation, rather than focus talks on costs and/or time away from campus (Salisbury et al., 2009). Additional research is needed to determine how social networks could be used as motivating factors to increase high-impact experience IE participation, especially among males.

CONCLUSIONS

Many studies exist on the benefits of high-impact experience participation, yet few have focused on the gender effect. The authors discovered a need for gender-specific initiatives to
promote participation, especially in addressing males’ participation rates. What reasons support the fact that females consistently are more interested and participate more often in high-impact experiences than do males? We speculated that females more easily requested and received parental support (i.e., financial or otherwise) to participate in high-impact experiences, than did males. Equally, we postulate that males may have self-imposed, tradition-bound, cultural expectations such as securing employment, becoming a primary breadwinner, etc., thereby limiting or prohibiting their high-impact experience participation. The readers should note that these our ideas are mere conjecture at this time. More research is needed to explain and understand better how, or if, gender differences affect high-impact experience interests, participation rates, outcomes, and long-term benefits.

Texas A&M University needs extra efforts from faculty and administrators alike to create high quality service learning experiences. The authors found evidence that students at Texas A&M University had inadequate awareness levels about high-impact experiences and their benefits. Mapping high-impact experiences available at Texas A&M University, creating new high-impact experience opportunities, incorporating HIEs into undergraduate studies, and increasing awareness of high-impact experiences’ benefits, may help increase overall high-impact experience participation.

REFERENCES


Undergraduates’ perceived interest


Undergraduates’ perceived interest


Undergraduates’ perceived interest
APPENDIX

Table 1

Students’ Level of Interest in Different Types of HIEs (N = 61)

<table>
<thead>
<tr>
<th>Type of HIEs</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>International study abroad or domestic study away</td>
<td>3.02</td>
<td>.98</td>
</tr>
<tr>
<td>Internships</td>
<td>3.00</td>
<td>1.03</td>
</tr>
<tr>
<td>Service learning courses</td>
<td>2.70</td>
<td>.93</td>
</tr>
<tr>
<td>Intensive writing courses</td>
<td>2.61</td>
<td>1.07</td>
</tr>
<tr>
<td>Collaborative learning communities</td>
<td>2.46</td>
<td>.98</td>
</tr>
<tr>
<td>Undergraduate research courses</td>
<td>2.43</td>
<td>1.01</td>
</tr>
</tbody>
</table>

Note. Means derived using a four-point Likert-type scale with ranges of 1.00-1.75 = Not interested; 1.76-2.50 = Slightly interested; 2.51-3.25 = Interested; 3.26-4.00 = Definitely interested.

Table 2

Students’ Likelihood of Participation in Different Types of HIEs (N = 61)

<table>
<thead>
<tr>
<th>Type of HIEs</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internships</td>
<td>3.61</td>
<td>1.35</td>
</tr>
<tr>
<td>Intensive writing courses</td>
<td>3.57</td>
<td>1.27</td>
</tr>
<tr>
<td>International study abroad or domestic study away</td>
<td>3.34</td>
<td>1.34</td>
</tr>
<tr>
<td>Undergraduate research courses</td>
<td>3.31</td>
<td>1.34</td>
</tr>
<tr>
<td>Service learning courses</td>
<td>3.30</td>
<td>1.22</td>
</tr>
<tr>
<td>Collaborative learning communities</td>
<td>3.13</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Note. Means derived using a five-point Likert-type scale with ranges of 1.00-1.80 = Definitely not likely; 1.81-2.60 = Probably not likely; 2.61-3.40 = Don’t know; 3.41-4.20 = Probably likely; 4.21-5.00 = Definitely likely.

Table 3

Importance of Factors in Determining Students’ Participation in HIEs (N = 61)

<table>
<thead>
<tr>
<th>Statements</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary cost to participate</td>
<td>4.20</td>
<td>1.08</td>
</tr>
<tr>
<td>Time required to participate</td>
<td>4.08</td>
<td>1.17</td>
</tr>
<tr>
<td>Future employability</td>
<td>3.95</td>
<td>1.28</td>
</tr>
<tr>
<td>Need for a new experience</td>
<td>3.93</td>
<td>1.11</td>
</tr>
<tr>
<td>To learn something new</td>
<td>3.93</td>
<td>1.11</td>
</tr>
<tr>
<td>Advice from professors, staff, or university advisors</td>
<td>3.82</td>
<td>1.22</td>
</tr>
<tr>
<td>Connection to academic studies</td>
<td>3.80</td>
<td>1.17</td>
</tr>
<tr>
<td>Exposure to other cultures or diverse people</td>
<td>3.61</td>
<td>1.36</td>
</tr>
<tr>
<td>Advice from friends</td>
<td>3.33</td>
<td>1.36</td>
</tr>
<tr>
<td>Advice from family</td>
<td>3.33</td>
<td>1.36</td>
</tr>
</tbody>
</table>

Undergraduates’ perceived interest
Note. Means derived using a five-point Likert-type scale with ranges of 1.00-1.80 = Not important; 1.81-2.60 = Slightly important; 2.61-3.40 = Moderately important; 3.41-4.20 = Important; 4.21-5.00 = Very important.

Table 4

Types of HIEs the University Should Offer More Often (N = 61)

<table>
<thead>
<tr>
<th>Type of HIEs</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internships</td>
<td>2.87</td>
<td>1.10</td>
</tr>
<tr>
<td>International study abroad or domestic study away</td>
<td>2.59</td>
<td>1.07</td>
</tr>
<tr>
<td>Undergraduate research courses</td>
<td>2.44</td>
<td>1.01</td>
</tr>
<tr>
<td>Service learning courses</td>
<td>2.43</td>
<td>1.06</td>
</tr>
<tr>
<td>Collaborative learning communities</td>
<td>2.40</td>
<td>.98</td>
</tr>
<tr>
<td>Intensive writing courses</td>
<td>2.28</td>
<td>1.08</td>
</tr>
</tbody>
</table>

Note. Means derived using a four-point Likert-type scale with ranges of 1.00-1.75 = Same amount; 1.76-2.50 = Somewhat more; 2.51-3.25 = More; 3.26-4.00 = Much more.

Table 5

Analysis of Variance (ANOVA): Students’ Level of Interest in Different Types of HIEs by Gender and Ethnicity (N = 61)

<table>
<thead>
<tr>
<th>Type of High-impact Experiences</th>
<th>Gender</th>
<th>Ethnicitya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internships</td>
<td>.03b</td>
<td>.59</td>
</tr>
<tr>
<td>Collaborative learning communities</td>
<td>1.16</td>
<td>.73</td>
</tr>
<tr>
<td>Undergraduate research courses</td>
<td>.55</td>
<td>.95</td>
</tr>
<tr>
<td>International study abroad or domestic study away</td>
<td>.43</td>
<td>.34</td>
</tr>
<tr>
<td>Service learning courses</td>
<td>.00b</td>
<td>.56</td>
</tr>
<tr>
<td>Intensive writing courses</td>
<td>.08</td>
<td>.25</td>
</tr>
</tbody>
</table>

Note. aEthnicity variables were collapsed into two categories: White not Hispanic (n = 44), and Black, Hispanic, Asian, and Multiracial (n = 17). b p < 0.05.