

# Terms of Engagement: Adults' Experience in Higher Education

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## Terms of Engagement: Adults' Experience in Higher Education

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**Abstract:** National Survey of Student Engagement (NSSE) data were re-analyzed to look for differences between traditional and nontraditional-age students. Surprisingly, no significant differences were found for five NSSE Benchmarks, including Supportive Campus Environment. Differences were found in subsequent analysis of two scales of academic engagement identified through follow-up factor analysis.

Between 2000 and 2010 postsecondary enrollment for students under age 25 increased by 34 percent and increased 42 percent for students 25 and older. Projecting from 2010 through 2020, the National Center for Educational Statistics (2012) anticipates a rise of 11 percent in enrollments of students under age 25 and a rise of 20 percent in enrollments of students age 25 and older. In 2009, learners age 25 and older accounted for 42% of the total college enrollments in the United States (U.S. Census Bureau, 2011). There is a conundrum at the heart of adult participation in adult education at all levels, but particularly within post-secondary education. Adult students, who generally attend school on a part-time basis, have a high dropout rate. Yet, when they do persist, they generally excel. Still, we need to better understand the factors that influence persistence and, more importantly, non-completion, among those adult students who do not meet their educational goals.

Past studies of adults' experience in higher education have focused on their motivation, experiences in the classroom, and their persistence and retention. For example, Donaldson and Graham (1999), in presenting a model of college outcomes for adult undergraduate students, found that despite adult students' lack of certain types of campus involvement and recent academic experience, they learn and grow as much or more than younger students during their undergraduate college years. Additionally, Philibert, Allen, and Elleven (2008) found evidence that traditional and nontraditional students differed in their approach to the classroom and the needs of nontraditional students may be different and not aligned with the programs provided by some educational institutions. In her review of research on adult learners in higher education, Ross-Gordon (2011) found numerous studies that substantiate adult learners' preference for active learning strategies that support cognitive growth and transformational learning. These studies also point to a lack of self-confidence exhibited by adults upon reentry to college and their frequent desire for highly structured learning experiences.

Much of the research has focused on motivation to participate. Stein, Wanstreet, and Trinko (2011) examined several factors associated with adults' decision to enroll in higher education and found an important factor that adult learners consider is the ease with which they are able to navigate through the institutional environment to secure needed resources and accomplish their academic work. This

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finding led Stein et al. to suggest that those institutions lacking an adult-centered culture will lose these learners.

Within higher education in general, much research has focused on student engagement. Engagement has been defined in a variety of ways; however, Cruce, Gonyea, Kinzie, Kuh, and Shoup (2008) define it as “When students are required to take responsibility for activities that require daily decisions and tasks they become invested in the activity and more committed to the college and their studies” (p. 557). A review of the literature also points to the fact that faculty are very important to the process of student engagement. Many faculty members do not feel a sense of responsibility in this area, however, as there is no way to determine if the feedback on student engagement surveys truly represents “their” students (Kuh & Rike, 2005). However, the works of many others indicate that teacher behavior and teacher engagement in the classroom are positively linked to high levels of student engagement (Briggs et al., 2005; Umbach & Wawrzynski, 2005). Perhaps Kuh (2007) captured it best when he stated, “arrangement of curriculum can ensure student engagement in productive activities.”

This study utilizes student engagement theory as its theoretical framework. The essence of student engagement theory is that if students are engaged in the life of an institution (e.g., academic course curricula, advising and support services, extracurricular events and programs), they are more likely to persist and graduate. The implications for the education of adults are significant and yet surprisingly our review of the literature did not point to past studies specifically investigating the engagement of adult students in higher education.

Therefore, the purpose of this study was to examine the relationship between student age and academic engagement. Specifically, the questions we asked were: (1) Do students, ages 25 or older, differ in their patterns of engagement from traditionally aged (i.e., 18-24 years) college students? (2) What student background factors (e.g., gender, class level, and self-reported grades) predict differences in dimensions of student engagement across the two age groups? (3) Are there specific engagement variables that differentially predict academic outcomes (i.e., self-reported grades) between traditional and nontraditional students? (4) Do the data support a hypothesized covariance structure that posits specific causal relationships among the engagement variables, and is this hypothesized structure invariant across the two age groups?

### **Methodology**

This study is a secondary analysis of data drawn from surveys collected as part of the National Survey of Student Engagement (NSSE). This instrument was developed as part of a national research project examining levels of college student engagement. According to NSSE developers, engagement consists of two critical features: (1) “The amount of time and effort students put into their studies and other educationally purposeful activities, and (2) how the institution deploys its resources and organizes the curriculum and other...opportunities to get students to participate in activities that...are linked to student learning” (NSSE website). The NSSE is designed to assess student engagement within individual institutions of higher education. The NSSE is administered annually at several hundred 4-year colleges and universities. The obtained data are shared with individual institutions. However, these data are not compared across institutions; rather, the information for a single institution is compared across a number of benchmarks, providing indicators of student engagement at that institution. For the purposes of our study, a random sample of student responses, across institutions, was analyzed. The data were drawn from the 2009 NSSE dataset (the most recently available data).

We drew a random sample,  $n=575$ , from the 2009 NSSE population,  $N=60,007$ , which is a sufficient sample size for statistical power. The NSSE population consists of 73.6% traditional-age students (i.e., 18-24 years) and 26.4% nontraditional adult students (i.e., 25 and older). The random sample for this study had similar proportions of traditional (74.2%) and nontraditional students (25.8%).

## Data Analyses

### *NSSE Benchmarks*

The NSSE benchmarks were developed by NSSE to measure student behaviors and institutional features that capture aspects of students' experiences that contribute to learning and personal development. These benchmarks are: Level of Academic Challenge (adjusted for part-time enrollment status; ACa), Active and Collaborative Learning (ACL), Student-Faculty Interaction (SFI), Enriching Educational Experiences, and Supportive Campus Environment (SCE). We conducted a series of 2-samples t-tests to determine if there were statistically significant differences between traditional and nontraditional students for the five NSSE benchmarks. No statistically significant differences obtained for any of these benchmarks of engagement. For the five NSSE benchmarks there were no statistically significant differences between the traditional and non-traditional students for ACa,  $p = .894$ ; ACL,  $p = .430$ ; SFI,  $p = .695$ , EEE,  $p = .165$ ; and SCE,  $p = .853$ . Based on these results, we conducted additional analyses that took a more nuanced examination of student engagement. We focused specifically on academic engagement, as it seemed most germane to determining students' prospects for success in college, i.e., persistence, achievement, and degree attainment.

### *Factor Analysis*

We began by conducting a factor analysis of NSSE survey items that addressed dimensions of students' academic engagement, given previous literature that suggested potentially higher levels of academic engagement for non-traditional age students. A principal components analysis of 16 survey items was conducted using Varimax rotation with Kaiser normalization. This analysis yielded a two-factor solution based on Eigenvalue = 1.00. The two scales were labeled *Direct Effort in Courses* (consisting of 7 items) and *Complementary Academic Experiences* (consisting of 5 items). Example items for the Direct Effort scale include, "Prepared two or more drafts of a paper or assignment before turning it in," and "Asked questions in class or contributed to class discussions." Cronbach's alpha for this scale = .708. Example items for the Complementary Academic Experiences include, "Tutored or taught other students," and "Worked with faculty members on activities other than coursework." Cronbach's alpha for this scale = .701. These two academic engagement scales were then used to compare traditional and nontraditional students.

## Results

We next conducted a series of two 2-samples t-tests to determine if there were differences between traditional and nontraditional students' responses on the two academic engagement scales. There was a statistically significant difference between the groups on the *Direct Effort in Courses* measure,  $t = 2.985$ ,  $df = 1,480$ ,  $p = .003$ . Nontraditional students had a statistically significantly higher mean score on this measure of academic engagement. There was no statistically significant difference between the two groups on the *Complementary Academic Experiences* scale,  $p = .192$ .

Next, we conducted a series of three 2-way analysis of variance, with *Direct Effort in Courses* as the dependent variable. This measure was used because it was the only academic engagement variable that distinguished traditional and non-traditional students. The purpose of the ANOVAs was to determine which, if any, student background factors – gender, class level, and self-reported grades) predict group differences on engagement. There was not a statistically significant interaction between gender and student group (i.e., traditional, non-traditional),  $p = .611$ . There was not a statistically significant interaction between class level (e.g., freshmen/sophomore or junior/senior) and student group,  $p = .903$ . There was not a statistically significant interaction between self-reported grades (i.e., As, Bs, or Cs) and student group,  $p = .791$ . These analyses indicate that these student factors are unrelated to group differences for the academic engagement variable, *Direct Effort in Courses*.

### Discussion

If we examine the research questions individually then the findings are of some interest. For the first question: Do students, ages 25 or older, differ in their patterns of engagement from traditionally aged (i.e., 18-24 years) college students? The answer appears to be somewhat, but not in the ways completely anticipated. There is a significant difference in terms of one aspect of academic engagement with non-traditionally aged students more likely to be engaged. Unsurprisingly, the non-traditionally aged students were more likely to be engaged through direct effort in courses. This is unsurprising and has been noted before. What is a bit different here is that this has no relation to course outcomes as indicated by students' self-reported typical grades (a proxy for GPA in the NSSE data). Therefore, this finding does not shed light on the high drop out level for the non-traditional age student. The second part of the analysis found no difference between the two groups in their complementary academic experience. Finally, an analysis of the NSSE benchmarks indicated no difference between the groups in their engagement in non-academic activities. This is fundamentally surprising and not what would have been predicted from the literature.

The second question asked: What student background factors (e.g., gender, class level, self-reported grades) predict differences in dimensions of student engagement across the two age groups? At this point, given the limitations of the instrument it is difficult to say why no differences were found. The third question asked: Are there specific engagement variables that differentially predict academic outcomes (i.e., self-reported grades) between traditional and nontraditional students? At this point, there do not seem to be any specific engagement variables that differentially predict academic outcomes. The fourth question asked: Do the data support a hypothesized covariance structure that posits specific causal relationships among the engagement variables, and is this hypothesized structure invariant across the two age groups? At this point, the data do not support a hypothesized covariance structure.

Our results contribute to furthering our understanding of student engagement, but more importantly to our understanding of adult students on campus. There have been many studies of the motivation of adult students and some that have looked at their lives on campus, but most writers make assumptions about the engagement of the adult student. One of these assumptions is that adult students focus on the classroom and that engagement in an academic sense is of greatest importance to them. This means, that there is a view that adults are not going to be part of campus life in the same way as traditionally aged students. Part of this is due to their different life roles. They are often rushing home to children or partners. They often have work responsibilities. Instead of being their primary identity, being

a student is an add-on. Strangely, what our data suggest is that there is little difference in non-classroom engagement between adults (those over 25) and the traditionally aged student.

It is too soon to ascribe meaning to this, but several possible explanations come to mind. The most intriguing is that adults might possibly be more engaged in activities than previously considered. The more likely explanation may be that age is no longer the defining variable distinguishing “traditional” and “non-traditional” students as it was once presumed to be. There is far greater support for this later view. Certainly the age of 25 is a somewhat arbitrary cut-off, seen as denoting students who are likely to be engaged in other life-roles in addition to that of student. A report by Choy (2002) suggests that nearly 75% of the student population enrolled in 1999/2000 exhibited one or more characteristics that might be thought of as nontraditional (e.g. attending college part-time, working full-time, having dependents), and that the student now in the minority is actually the so-called traditional student (attending school full time, living on campus, financially dependent on parents, working part-time or not at all). Assuming this trend has continued through the time that the 2009 NSSE data were collected, the lack of significant differences in non-academic student engagement may be attributable to this blurring of life-style distinctions between students older and younger than 25. Many twenty-year old students today may be equally challenged to engage in campus-based activities beyond the classroom.

It is also important to realize that this study confirmed previous findings showing that older, nontraditional students demonstrate greater academic engagement in college. This academic engagement is, however, limited to students’ efforts in regards to activities that are most salient to assigned coursework (e.g., writing papers, participating in class discussions). Engagement in extra-course activities (e.g., discussing ideas and readings outside of class) does not differ for the two student groups. It may be that there are other dimensions of academic engagement that are not captured by the NSSE survey. Research is needed to identify these dimensions of academic engagement and how they might vary across different types of students in higher education.

The degree to which college students are engaged in their coursework is challenging to determine by emphasizing simple categorical distinctions (i.e., “younger vs. older,” “traditional vs. nontraditional”). There are likely important nuances in how individuals define themselves as students, and these views may change frequently for many students. That is, a student might initially enroll in college as a full-time 18-year-old college freshman, but then reduce their course load due to financial reasons, need to work or to care for a family member. Alternatively, a nontraditional adult learner might fully immerse themselves in their coursework on a full-time basis. Thus, simple categorizations of students by researchers may limit the ability to examine effects of factors that impact students’ enrollment and persistence decisions and academic engagement. More research is needed to identify the range of factors that impact students’ academic participation and experiences, rather than simply using age or enrollment status (i.e., full-time, part-time) as the sole explanation for academic engagement.

While adults now account for nearly half of students enrolled in higher education, they remain an understudied population. Surveys such as the NSSE provide a rich body of information about current student populations, yet few analyses have examined the adult student subpopulation. When we consider the retention of adult students in higher education, we are struck by the high dropout rate among these students. Of course, this lack of persistence has many causes. Previously, educators and policymakers have attributed dropout to aspects of adult students’ motivation. Today, however, educators focus on the lack of engagement among students. Yet, much of this is conjecture. We hope our analyses renew discussions not only about student engagement but also their motivation -- perhaps connecting these two

previously distinct variables in the research on persistence and retention. The implications may extend beyond adult students in higher education to adult basic education students as well.

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