Exploring the Relationship of Background, Technology and Motivation Variables to Business School Transfer Intent for Two Mixed Course Format Business Undergraduate Samples

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Abstract

Business students are increasingly taking online courses to supplement their more traditional face-to-face (F2F) course-delivered education. This study explored the relationship of demographic, curricula, and motivation variables on business school transfer intent for a mixed course delivery sample of undergraduate business students taking online classes. Two separate samples of students taking both online and F2F courses (i.e., mixed course delivery format) filled out an online survey in the fall 2016 and spring 2017 semesters. Intent to transfer business schools was lower for both samples. Results showed that being male, perceived favorability of online courses, and lower institutional commitment were significant correlates of intent to transfer across both samples. This outcome variable, intent to transfer, should be added to the research agenda for ongoing efforts across all universities and colleges when testing the impact of online education.

Keywords: intent to transfer, online courses, mixed course delivery format, institutional commitment

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Using U.S. Department of Education (DOE) figures, Jain (2015) found that the percentage of undergraduate students taking at least one online course increased from 15.6% to 26.6%, from 2003 to 2013. Increasingly, many universities and colleges are viewing online education as a critical component of their enrollment strategic plan to accommodate business undergraduate students' needs (Comer, Lenaghan, & Sengupta, 2015). In addition to full-time online undergraduate Bachelor of Business Administration (BBA) programs, undergraduate business students are increasingly taking online courses to supplement their more traditional face-to-face (F2F) course-delivered education, based on factors including flexible scheduling (Daymont, Blau,

& Campbell, 2011), and convenience (Cochran, Baker, Benson, & Rhea, 2016), as well as motivation-related factors, such as intrinsic motivation (Eom & Ashill, 2016) and self-discipline (Comer et al., 2015). Students who take both F2F and online classes in a semester represent a "mixed course delivery format" sample (Blau, Drennan, Hochner, & Kapanjie, 2016; Blau, Pred, Drennan, & Kapanjie, 2016). Given such positive features of online classes, would taking online classes affect the likelihood of a business undergraduate wanting to transfer to another business school? The goal of this study was to explore the relationship of demographic, curricula, and motivation variables to transfer intent for a mixed course sample of undergraduate business students taking online classes.

Review of Related Literature

Many College Students Transfer

There is a general website for college transfer information (www.collegetransfer.net, n.d.) where all types of students (e.g., community college, four-year, international students) can explore different transfer issues (e.g., transferring credits or choosing a college that best fits with one's major). Tracking students who first enrolled in college in 2008, the National Student Clearinghouse Research Center found that over 37% percent of college students transfer at least once within six years (Fain, 2015). Transfers can be different types, not just from a two-year community college to a four-year college but also from a four-year college to another four-year college or from a four-year college back to a community college. Research by Cabrera, Burkum, and La Nasa (2005) found that that a student's probability of successfully transferring from a two-year to four-year institution improved based on the following: higher socioeconomic status; encouragement (especially from friends); higher high school academic preparation; higher college aspirations; higher grade point average (GPA) achieved in the two-year institution; and most importantly, taking at least two science and two math classes in community college. Community college students who took two science classes were 33% more likely to successfully transfer to a four-year institution compared to students who took no science classes. For math, students who took two math courses were 19% more likely to successfully transfer. Reinforcing the importance of higher academic preparation in high school, Horn, Kojaku, and Carroll (2001) found that more rigorous high school curricula (including precalculus or higher and at least one advanced placement course or test) enhanced successful student transfer to a four-year institution.

Students transferring to another institution represents a form of "turnover" that colleges and universities try to minimize because of the loss in revenue (Raisman, 2016). Using a sample of first-to-second-year undergraduates, Herzog (2005) found that academically well-prepared freshmen with unmet financial need were more likely to transfer to another four-year institution. This study specifically focused on the transfer intent of business students taking online courses; general background research on college persistence toward graduating and related outcomes was also reviewed.

Research on Persistence and Related Student Outcomes

Research (Tinto, 1997) has demonstrated the importance of motivational variables (e.g., goal commitment and institutional commitment) and intention to persist as the most proximal factors impacting student persistence toward graduation. Earlier research using a sample of nontraditional students (e.g., commuter, part-time) reinforced the importance of commitment for student persistence (Metzner & Bean, 1987). Later inferential modeling research (Robbins et al. 2004; Robbins, Allen, Casillas, Peterson, & Le, 2006) investigated the relationship of

demographics (e.g., race, gender, and socioeconomic status) and background variables (e.g., GPA, transfer status) on college student persistence. This research found, consistent with earlier studies of attrition and persistence (Metzner & Bean, 1987; Tinto, 1997), that such demographics and background variables, although useful, have not accounted for as much variance in persistence toward graduation as psychosocial and study-skill factors (e.g., institutional commitment, social involvement, and academic-related skills). Institutional commitment or a student feeling that he or she is attending the right institution is a particularly important antecedent of persistence for general student samples (Davidson, Beck, & Milligan, 2009). A more recent model of student persistence shows demographic variables as a more distal (i.e., less direct) predictor set of persistence compared to more proximal variable sets, such as individual student experiences (Reason, 2009a). However, prior research also noted that given the changing demographics of the undergraduate student population, it is still important to at least control for the potential relationships of demographic and background variables on student persistence or related outcomes (Reason, 2009b). For example, Love (2013) found that transfer students had lower institutional commitment than nontransfer students. Focusing specifically on business undergraduates, Mangum, Baugher, Winch, and Varanelli (2005) found that three factors showed a significant correlation of second-semester freshmen to their subsequent dropout from a business school: lower first-semester GPA, lower first-semester teaching course evaluations, and greater financial difficulty perceptions.

There has been research using samples of undergraduates taking online courses. Shea and Bidjerano (2014) found that, after controlling for demographic characteristics (e.g., gender, age, race), community college students who had taken some of their initial classes online had a significantly better chance of graduating than their classroom-only counterparts. Beck and Milligan (2014) found that online students' institutional commitment was positively related to their interaction with the school's academic environment (e.g., graduation goal, academic integration, and degree commitment). Based on a mixed course delivery format sample of 263 business undergraduates taking at least one online or hybrid (mix of online and F2F delivery) course, Blau, Drennan, et al. (2016) investigated correlates of perceived timely graduation (i.e., online/hybrid courses helping students to graduate sooner). They found that a technology variable (i.e., perceived ease of the use), student motivation, and perceived learning were significant positive correlates for explaining timely graduation. Twenty-five percent of the variance in timely graduation was accounted for, and these three correlates accounted for 19% of this 25%.

Control Variables and Technology Variables with Prior Online Samples

In addition to the above-cited studies, prior research using perceived learning in online courses as the outcome variable (e.g., Arbaugh, 2005) has worked with three general independent variable sets: (a) demographic (e.g., age, gender), (b) technologically related (e.g., ease of use, experience in online courses), and (c) pedagogical (e.g., perceived course interaction). Blau, Pred, et al. (2016) found differences in the perceptions of perceived favorability of online courses for quantitative versus qualitative business majors. This suggests that quantitative/qualitative major should be controlled for. Endres, Chowdhury, and Frye (2009) found that MBA students who were more satisfied with their online courses were more likely to recommend the course, faculty, and university to others. Barnard, Osland Paton, and Rose (2007) found that undergraduates who had better perceptions of online course communications and collaboration were more likely to recommend their academic program to another student. Collectively, the results of these two studies suggest that students with greater satisfaction with online courses were more likely to recommend their university or academic program. Students who are more likely to recommend their university or academic program should have lower intent to transfer (Moldoff, n.d.). This suggests that if students are more likely to recommend current business school online courses, this

should reduce their intent to transfer. Given the previously noted lack of specific prior research focusing on intent to transfer as the dependent variable, the general research question asked was the following:

> What is the relationship of demographic, curricula, and motivation variables to students' intent to transfer from their current business school?

Methods

Sample and Procedure

Near the end of the fall semester of 2016, all business undergraduates who enrolled in at least one synchronous online course or hybrid course ($N = 3,776$) were contacted by school email address and asked to voluntarily fill out an online survey. Student enrollment in either an online or hybrid course was the initial identifier for contacting participants. The University Institutional Review Board approved data collection. The business school (Business School X) is part of a large urban state-supported Tier 1 Association to Advance Collegiate Schools of Business (AACSB) accredited university located in the Mid-Atlantic region of the United States. As an incentive to voluntarily fill out the online survey, two prizes were offered—an Apple or Android watch—with the winners to be chosen by random number lottery. Prior research has suggested that incentives can improve online survey response rates (Fan & Yan, 2010). A student could fill out a survey for each online or hybrid course taken in the fall, and the student's name was entered in the lottery for each completed survey. Only respondents who completed a survey were eligible to win. Multiple responses from the same student were deleted during the data analysis as explained below. One survey reminder was sent one week after the initial invite.

Seven hundred and ten ($N = 710$) students at least partially filled out a survey. Ninety-two percent of the respondents were full-time students (taking at least 12 credits/semester). This represents a 19% response rate (710/3,776). While this may be a less-than-desired response rate, literature has shown that a lower rate may not be evidence of survey bias (Rindfuss, Choe, Tsuya, Bumpass, & Tamaki, 2015). For the fall semester, the breakdown of courses taken by participating undergraduates was one (52%) or two (15%) online courses, along with four (38%) or five (34%) traditional F2F classes. Very few students took hybrid classes due to limited offerings relative to the increased number of online course offerings. Thus, respondents were collectively a "mixed course format" sample (i.e., had taken a general mix of online and F2F classes).

The same general process was followed for collecting spring 2017 data on a separate sample of business undergraduate students who enrolled in at least one online or hybrid course ($N = 3,543$). Eight hundred and twenty-four ($N = 824$) students at least partially filled out a survey. Ninety-three percent of the respondents were full-time students. This represents a 23% response rate (824/3,543). The number of online (one course: 49%; two courses: 13%) and traditional F2F courses (four courses: 35%; five courses: 30%) being taken by the spring sample were consistent with the fall mixed course format sample. Demographics for both complete-data samples are reported below.

Measures

Demographic variables. Six variables were measured: gender, ethnic background, commuter status, currently working, transfer status, and age. *Gender* was indicated as 0 = male, 1 = female. *Ethnic background* was indicated as 1= African American, 2 = Asian, 3 = Caucasian, 4 = Hispanic or Latino, and 5 = other (e.g., American Indian, mixed, biracial). *Commuter status* was

indicated as 0 = no, 1 = yes. *Currently working* was indicated as 0 = no, 1 = yes. *Transfer status* was measured as 1 = no transfer (started as first-semester freshman), 2 = transferred in as freshman, 3 = transferred in as sophomore, 4 = transferred as a junior, and 5 = transferred as a senior. *Age* was measured in yearly response categories, from 1 = 18 years old or less, 2 = 19, 3 = 20 … to 34 = 51 or older. This response category mean will be converted to years when reported in the text for easier interpretation.

Curricula-related. Four variables were measured: GPA, number of prior online/hybrid courses taken, quantitative/qualitative major, and perceived favorability of online/hybrid course (PFoOC). *GPA* (cumulative) was measured in incremental self-report response categories increasing by one for every tenth-point increase in GP, where 1 = less than 2.0, 2 = 2.0, 3 = 2.1, 4 = 2.2, … to 22 = 4.0. This response category mean will be converted to a 4.0 scale when reported in the text for easier interpretation. *Number of prior online* and *hybrid courses taken* were separately measured from 0 to 9 or more. There was a big discrepancy between these measures. For the *number of prior online courses taken*, the fall ($M = 7.03$, $SD = 2.09$) and spring sample means ($M = 7.36$, $SD = 2.36$) were much higher than for the *number of prior hybrid courses taken*, reported by the fall ($M = 1.89$, $SD = 1.50$) and spring sample means ($M = 1.92$, $SD = 1.58$). Therefore, these separate items were combined to indicate the number of prior online and hybrid taken (*prior online/hybrid courses*). *Quantitative/qualitative major* was measured by asking "which category below best describes your primary major?" Respondents were asked to choose what they felt was their primary major if they had a double major. *Quantitative* (coded 0 for analyses) consisted of Finance, Accounting, Risk Management & Insurance, Management Information Systems, Actuarial Science, Economics, or Statistics, and *qualitative* (coded 1 for analyses) consisted of Marketing, Human Resource Management, International Business, Entrepreneurship, Legal Studies, and Real Estate. An independent cross-disciplinary business faculty committee, when suggesting general grading guidelines, had established this quantitative–qualitative breakdown. *Perceived favorability of online/hybrid courses (PFoOC)* was measured using the following four items: (1) "compared to face-to-face lectures, the high-quality video lectures were," (2) "compared to face-to-face class discussions, the live online WebEx sessions were," (3) "compared to face-to-face class participation, the online discussion boards were," and (4) "overall compared to face-to-face classes, the online course was." Responses were made using the following scale: 1 = *very inferior* to 7 = *very superior*. A *not applicable* response was also included for each item, and was coded as missing data. When aggregated into a scale, consistent with prior research (Blau, Pred, et al. 2016), most of the missing data across both samples came from using this scale. Cronbach alphas for this scale were .78 and .76 for the fall and spring samples. These scale reliabilities were consistent with Blau, Pred, et al. (2016).

Motivation-related. Two variables were measured: *willingness to recommend online courses* and *institutional commitment*. Unless otherwise noted, all multi-item measures used a 7-point response scale, where 1 = *strongly disagree* to 7 = *strongly agree*. *Willingness to recommend online courses* was measured using the following two items: "I would recommend this online/hybrid course to other students," and "I would recommend taking other business school online/hybrid courses in general to students." Cronbach's alpha for this two-item scale was .88 for the fall sample and .87 for the spring sample. *Institutional commitment* was also measured using two items: "I am sure University X is the right place for me," and "I am confident that I made the right decision to attend University X." These two items were adapted from Davidson et al. (2009). Cronbach's alpha for this two-item scale was .95 for the fall sample and .94 for the spring sample.

Intent to transfer. Given the lack of prior research using a multi-item scale specifically focusing on undergraduate intent to transfer, a two-item study-specific measure was used. The two

items were: "I considered transferring from Business School X to another university's business school," and "I looked at other business schools while attending Business School X with the intent of transferring." Cronbach's alpha for this two-item scale was .91 for the fall sample and .90 for the spring sample.

Data Analyses

All data analyses were done using SPSS-PC (SPSS, 2013). Using listwise deletion to test the hypotheses, missing data across all studied variables ultimately reduced the complete-data sample size to $N = 376$, or 53% (376/710), for the fall sample and $N = 435$, or 53% (435/824), for the spring sample. This deletion also included multiple submissions from the same person in each sample to eliminate autocorrelation as a bias (Stevens, 1996). After deleting multiple submissions, inspection of the fall data sets showed minimal mean (M) differences between complete-data and partial-data samples.

Means, standard deviations, and correlations between continuous variables are reported. Scale means for multi-item variables were divided by the number of items so that the mean is based on the response scale. The research question, using intent to transfer business school as the dependent variable, was tested using hierarchical regression analyses. Care was taken to avoid several errors associated with hierarchical/stepwise regression: neglect of a theoretical basis for using, violation of causal priority, and misinterpretation of results (Petrocelli, 2003). Based on general prior theory and research (Arbaugh, 2005; Reason, 2009a), the demographic variables were entered as Step 1 in the hierarchical regression analyses, followed by the course- or technology-related variables in Step 2, and finally the motivation-related variables in Step 3. Ethnic background (0 = Caucasian, 1 = Non-Caucasian) and transfer status (0 = no, 1 = yes) were each recoded into binary measures to allow straightforward entry (Stevens, 1996) as demographic variables for Step 1 in the regression analyses. Regression models were checked for outliers (there was one only outlier in the spring sample with a residual of at least three standard deviations). This outlier was deleted (Stevens, 1996). Thus, the sample sizes for the regression analyses were $n = 376$ (fall) and $n = 434$ (spring). For the regression analyses, it was determined that the assumptions of no multicollinearity, linearity, homoscedasticity and normally distributed errors were satisfactorily met (Stevens, 1996). Collectively, support for these assumptions can give the reader more confidence in the study findings (SPSS, 2013). Only the final regression models for the fall and spring samples are presented below.

Results

Sample Characteristics

Table 1 shows the frequency and percentage statistics for the six noncontinuous variables for each complete-data sample: $n = 376$ (fall) and $n = 435$ (spring). Results show a general consistency across both samples on these six variables. There was a slight flip from a male (fall 2016) to female (spring 2017) majority, but otherwise the majority of respondents across each sample were Caucasian, entered as freshmen, lived on campus or within walking distance, were currently working, and were quantitative majors. By comparison, for the fall of 2016, based on 28,203 matriculated undergraduates at the university, 53% were female and 57% were Caucasian.

Table 1.
Frequencies and Percentages for Fall 2016 and Spring 2017 Complete-Data Noncontinuous Variables

	Fall 2016 ($n = 376$)		Spring 2017 ($n = 435$)	
Variable	n	%	n	%
Gender				
Male	201	53	201	46
Female	175	47	234	54
Ethnic Background				
Caucasian	219	58	224	52
Asian	85	23	112	26
African American	33	9	48	11
Hispanic or Latino	15	4	14	3
Other (e.g., American Indian, mixed)	24	6	37	8
Transfer Status				
Entered as first semester freshman	202	54	229	53
Transferred in as a freshman	16	4	23	5
Transferred in as a sophomore	77	21	97	22
Transferred in as a junior	68	18	78	18
Transferred in as a senior	13	3	8	2
Commuter Status				
On campus/in walking distance	222	59	248	57
Commuter	154	41	187	43
Currently working				
No	156	42	171	39
Yes	220	58	264	61
General Type of Major				
Quantitative (e.g., Finance)	196	52	238	55
Qualitative (e.g., Marketing)	180	48	197	45

General Results

Table 2 shows the means, standard deviations, and correlations for the seven continuous variables for the fall 2016 and spring 2017 complete-data samples. Overall, there is general consistency in the mean levels of these variables between the samples. Highlighting several variable results, based on the 7-point response scale, the overall means for intent to transfer business school are low for the fall of 2016, $M = 2.67$, $SD = 1.89$, and spring of 2017, $M = 2.86$, $SD = 1.95$. The means for institutional commitment are high in fall 2016, $M = 6.08$, $SD = 1.17$, and spring 2017, $M = 6.05$, $SD = 1.16$. Looking at the correlational results, perceived favorability of online courses had a consistent positive relationship to intent to transfer for both the fall of 2016, $r(374) = .19$, $p < .01$, and spring 2017, $r(433) = .14$, $p < .01$ samples. Institutional commitment

had a consistent negative relationship to intent to transfer for both the fall 2016, $r(374) = -.36$, $p <$ .01, and spring 2017, $r(433) = -.35$, $p < .01$ samples. Looking at intercorrelations between independent variables, the strongest fall 2016 sample correlation was between willingness to recommend online courses and institutional commitment, $r(374) = .50$, $p < .01$; while the strongest spring 2017 sample correlation was between perceived favorability of online courses and willingness to recommend online courses, $r(435) = .44$, $p < .01$. These intercorrelations indicate sufficient discriminant validity between independent variables (Stevens, 1996).

Test of Research Question

Using intent to transfer business school as the dependent variable, the final stepwise or hierarchical regression models for the fall 2016 and spring 2017 samples are shown in Table 3. Looking at the fall 2016 sample first, the demographic variable set accounted for a significant 8% amount of variance, $F(6,369) = 5.52$, $p < .01$. The only significant correlate within this set was gender (males higher), $b = -.66$, $t(363) = -3.62$, $p < .01$. For Step 2, when the curricula-related variables set was added, an additional significant 3% of the variance for intent to transfer was accounted for, $F(4,365) = 2.93$, $p = .02$. The only significant correlate within this set was perceived favorability of online courses, $b = .27$, $t(363) = 3.58$, $p < .01$. Finally, in Step 3, the motivation-related variables set accounted for an additional 11% of the variance for intent to transfer, $F(2, 363) = 25.87$, $p < .01$. Within this set, only institutional commitment was a significant correlate, $b = -.58$, $t(363) = -6.39$, $p < .01$. Overall, 22% of the variance in intent to transfer business schools was accounted for, $F(12, 363) = 8.62$, $p < .01$.

Looking at the spring of 2017, the demographic variable set accounted for a significant 6% amount of variance, $F(6,427) = 4.59$, $p < .01$. There were two significant correlates within this set; gender (males higher), $b = -.35$, $t(421) = -2.03$, $p = .02$, and commuter status (noncommuters higher), $b = -.59$, $t(421) = -2.93$, $p < .01$. For Step 2, when the curricula-related variables set was added, an additional significant 3% of the variance for intent to transfer was accounted for, $F(4,423) = 3.58$, $p < .01$. The only significant correlate within this set was perceived favorability of online courses, $b = .30$, $t(421) = 4.09$, $p < .01$. Finally, in Step 3, the motivation-related variables set accounted for an additional 14% of the variance for intent to

transfer, $F(2, 421) = 36.56$, $p < .01$. Within this set, only institutional commitment was a significant correlate, $b = -.66$, $t(421) = -8.37$, $p < .01$. Overall, 23% of the variance in intent to transfer business schools was accounted for, $F(12, 421) = 10.23$, $p < .01$.

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Table 2.

Means, Standard Deviations, and Correlations for Continuous Variables for Fall 2016 and Spring 2017 Complete-Data Samples

Measure	Fall 2016 (n = 376) M	SD	Spring 2016 (n = 435) M	SD	1	2	3	4	5	6	7
1. Age[a]	5.35	5.00	5.80	5.34	(---)	-.11*	.31**	.09	.14**	.13**	-.13**
2. Grade Point Average[b]	14.29	4.38	14.35	4.59	-.14**	(---)	-.10*	-.19**	-.03	-.02	-.07
3. Prior Online/Hybrid Courses[c]	9.28	2.87	9.69	3.18	.38**	-.16**	(---)	.15**	.09	.01	-.06
4. Perceived Favorability Online Courses[d]	4.38	1.32	4.40	1.34	.08	-.14*	.12*	(---)	.44**	.17**	.14**
5. Willingness to Recommend Online Courses[d]	5.64	1.38	5.71	1.30	.07	.02	.09	.37**	(---)	.39**	-.05
6. Institutional Commitment[d]	6.08	1.17	6.05	1.16	.06	.07	.02	.05	.50**	(---)	-.35**
7. Intent to Transfer Business School[d]	2.67	1.89	2.86	1.95	-.05	-.02	.01	.19**	-.10*	-.36**	(---)

Note. $n = 376$ for fall; $n = 435$ for spring. *$p < .05$. **$p < .01$. (two-tail); (---) in the diagonal separates the fall sample (below diagonal) from the spring sample (above the diagonal).

[a]*Age*, 1 = 18 or less to 34 = 51 or older; [b]*Grade Point Average*, 1= less than 2.0 to 22 = 4.0; [c]*Prior Online/Hybrid Courses*, separately measured and then combined, where 0 = 0 to 9 = 9 or more; [d]*Perceived Favorability Online Courses*, *Willingness to Recommend Online Courses*, *Institutional Commitment*, *Intent to Transfer Business School*, 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *neither agree nor disagree*, 5 = *somewhat agree*, 6 = *agree*, 7 = *strongly agree*.

Table 3.

Final Stepwise Regression Models Showing Incremental Effect of Demographic, Curricula-Related, and Motivation-Related Variable Sets for Explaining Intent to Transfer Business School for Fall 2016 and Spring 2017 Samples

	Fall 2016 Intent to Transfer b	SE	R^2	Chg R^2	Spring 2017 Intent to Transfer b	SE	R^2	Chg R^2
Step 1: Demographic Variables								
Gender[a]	-.66**	.18			-.35*	.17		
Ethnic Background[b]	.33+	.19			.23	.18		
Transfer Status[c]	.28	.20			.35	.20		
Commuter Status[d]	-.30	.21			-.59**	.20		
Currently Working[e]	-.10	.19			-.08	.17		
Age	-.01	.02			-.03	.02		
			.08**				.06**	
Step 2: Curricula-Related Variables								
Grade Point Average	.02	.02			.03	.02		
Prior Online/Hybrid Courses	.01	.03			-.02	.03		
General Type of Major[f]	-.20	.18			-.05	.17		
Perceived Favorability Online Courses	.27**	.08			.30**	.07		
			.11**	.03*			.09**	.03**
Step 3: Motivation-Related Variables								
Willingness to Recommend Online Courses	-.02	.04			-.08	.07		
Institutional Commitment	-.58**	.09			-.66**	.08		
			.22**	.11**			.23**	.14**

Note. Fall 2016, $n = 376$; spring 2017, $n = 434$. *b* is unstandardized regression weight, *SE* = standard error; R^2 = variance accounted for; Chg R^2 = change in variance accounted for.

+ $p < .10$. *$p < .05$. **$p < .01$ (two-tail).

[a]Gender (0 = male, 1 = female); [b]Ethnic Background (0 = Caucasian, 1 = Non-Caucasian); Transfer Status[c] (0 = no, 1 = yes); [d]Commuter Status (0 = no, 1 = yes); [e]Currently Working (0 = no, 1 = yes); [f]General Type of Major (0 = Quantitative, 1 = Qualitative).

Discussion

To the authors' knowledge, this is the first study empirically testing correlates of intent to transfer business schools using mixed-course format business undergraduates (i.e., those taking a mix of online and F2F classes). Online courses at business schools continue to grow in popularity (Comer et al., 2015). Beyond full-time online BBA programs, many business undergraduates are increasingly taking online courses to supplement their more traditional F2F-course-delivered education. These students represent a mixed-course format sample. The separate samples studied here consisted of full-time business undergraduates taking at least one online course and primarily F2F courses. By using separate samples rather than combining them, it is possible to validate the results (Stevens, 1996). Perhaps most importantly, based on the 7-point response scale used, the means for intent to transfer business schools were low for both samples (fall 2016, $M = 2.67$; spring 2017, $M = 2.86$). These lower means for transfer intent are important, as colleges and universities try to minimize students transferring to another institution because such turnover results in revenue loss (Raisman, 2016).

Across both samples, being male, reporting higher perceived favorability of online courses, and lower institutional commitment were significantly related to intent to transfer business schools. For the spring 2017 sample only, being a noncommuter was also related to higher intent to transfer. However, this finding was not validated by the fall 2016 sample. For gender, it may be useful for the dean's office to randomly interview in a cost-effective manner (e.g., focus group, by phone) male undergraduates to probe more about whether and why they could have a higher intent to transfer business schools (Cochran et al., 2016). This probing could also be done by the business school advisors, when students have any questions (e.g., course registration issues). A recent report by the National Student Clearinghouse, or NSC (Shapiro, Dundar, Wakhungu, Yuan, & Harrell, 2015), found that overall, female undergraduates had a slightly higher transfer-percentage rate than male (39% versus 37%). It is important to note that this study only measured transfer intent, not actual transfer, so again the dean's office could try to investigate whether males actually transfer more than females. In addition, the dependent variable focused on transfer intent to another business school, not to a different college (e.g., liberal arts, engineering, science and technology) within the same university or a different university.

Perceived favorability of online courses was positively related to intent to transfer to another business school. This suggests that factors associated with online courses, such as

flexible scheduling (Daymont et al., 2011) and convenience (Cochran et al., 2016) may be relevant. As such, if students see online learning in a more favorable light, compared to face-to-face classes, and if they cannot get their course needs met in a timely manner, they may be more likely to explore transferring to another school. Thus, as online learning continues to increase, it seems even more important to monitor whether student course needs are being met. Online degree programs that cohort students can help to increase their academic and social integration, and this is important to student persistence (Lee & Choi, 2011). Cohorting students where feasible into prerequisite-linked individual online courses may also help to increase students' academic and social integration (Beck & Milligan, 2014).

One surprising finding above was that perceived favorability of online courses was also weakly positively correlated with institutional commitment. This finding may be attributed to some students' increased institutional commitment due to satisfaction with flexibility of offerings. As students see more options given to them, they may increase their commitment to the university. This finding, however, should be investigated further.

The strongest correlate, however, across both samples, was institutional commitment, which showed a strong negative relationship to intent to transfer business schools. Prior research has shown that institutional commitment, or a student feeling that they are at the right institution, has a robust effect on general student persistence (Davidson et al., 2009; Robbins et al., 2004) and online student persistence (Beck & Milligan, 2014). Finding ways to continually build student institutional commitment is probably the best preventive measure against transfers. Prior research (Metzner & Bean, 1987; Tinto, 1997) suggests these should include increased social integration (e.g., student group memberships) and academic variables (e.g., good career/academic advising).

Based on student-persistence-related research, there is a rich history of research on significant antecedents of institutional commitment (Beck & Milligan, 2014), including the important stakeholder roles that academic (e.g., faculty, advisors), administrative (e.g., financial, career placement, or counseling), and social (e.g., campus organizations, housing) staff collectively play in building such student commitment. Raisman (2016) collected data by interviewing 618 college students who had left at least six months before being interviewed. The study found that the two biggest contributors to students leaving were "customer service" issues—that is, "the college doesn't care" (20%) and "poor service and treatment" (24%). Continually monitoring (e.g., via yearly survey) how students feel about their university or college, as well as academic, social, and administrative components, is critical. For example, academic advising has been found to be important to student satisfaction (Douglas, Douglas, & Barnes, 2006). By building strong institutional commitment at a college or university, this can transcend students' changing colleges/schools within a university (e.g., liberal arts to business), or changing majors within a school (e.g., finance to marketing). Such intra-university transfers still retain the student. Thus, students may carry out different within-university transfers but with higher institutional commitment, still stay enrolled in the university.

Study Limitations and Implications for Future Research

Only smaller percentages (22% for fall; 23% for spring) of intent to transfer were accounted for collectively by the variables used in this research design. Drawing on prior attrition- and persistence-related research (Metzner & Bean, 1987; Tinto, 1997), to have been able to also measure student goal commitment, as well as academic integration (e.g., academic advising) and social integration (e.g., college friends) variables, may have helped to explain additional transfer intent variance. However, missing data was already a concern, and making the survey longer would have probably further reduced the response rate (Fan & Yan, 2010). There were some variable mean differences between the complete-data versus incomplete-data respondents for both samples. However, these mean differences were not large.

It is important to caution against generalizing the results of this study to other business undergraduates or more general college student samples. Both samples were of full-time students, primarily taking F2F courses at a Tier 1 urban, state-supported AACSB university. Sampling undergraduates in other business school and general college settings is important (e.g., Tier 2 AACSB, rural, private). For an undergraduate business student already studying at an AACSB accredited school, it may be a little more challenging to transfer to another business school. Having started at an AACSB-accredited school, it could be in the students' best interest to transfer to another AACSB school (e.g., to maximize course credit transfer).

Students taking an online or hybrid class was the initial reason for survey eligibility. Online versus hybrid are two different classroom delivery modes. However, students were asked to respond to the "online components" of their hybrid course (e.g., video lectures, WebEx sessions, online discussion boards). Therefore, items were phrased using an "online/hybrid" referent. Given

the concern about missing data, this online/hybrid referent allowed for a larger aggregated complete-data sample size. Depending on the number of online versus hybrid courses offered in a university setting, future research could consider further distinguishing online versus hybrid course samples. Although a student's complete-data response was analyzed only once in a semester, it is possible that the same student could have participated in the separate semesters of data collection. However, if the same student participated, the surveys were five months apart (December 2016 and April 2017). Such a time gap should minimize survey bias (e.g., students remembering in April how they responded in December). In addition, it is highly likely that the "same" student across both surveys would be answering survey items about a different course in each semester.

Business courses were selected based on student enrollment, and there was no control for the mix of online/hybrid or F2F courses sampled (Blau, Pred, et al., 2016). Likewise, there was no control for professors teaching different course formats. In addition to the measurement issues already noted, all measures were self-reported, so common method variance is a limitation. A one-factor test (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003) found that the first factor accounted for 19% of the total variance in the fall sample, and there were five factors with eigenvalues of at least one. For the spring sample, the first factor accounted for 20% of the total variance, with five factors having eigenvalues over one. These results indicate that if the first factor represents "method variance," it is not an overriding limitation. There were much lower means for the number of prior hybrid courses (versus online classes) taken. The prior hybrid course measure was "aggregated" into the prior online course measure. Short scales, demonstrating good reliability, for measuring intent to transfer, institutional commitment, willingness to recommend online courses, and perceived favorability of online courses were successfully used.

Conclusion

The percentage of undergraduate students taking at least one online course is expected to continue to grow (Jain, 2015). Continual efforts to monitor the effects of online courses on student-related outcomes, including persistence, institutional commitment, and learning, are needed. This study explored the relationship of demographic, curricula, and motivation-related variables on a less researched outcome variable (i.e., business undergraduates' intent to transfer to another business school). In summary, we conclude that continually monitoring and building student overall institutional commitment is the best way to deter student transfer intent. This outcome variable, intent to transfer, should be added to the research agenda for ongoing efforts across all universities and colleges when testing the impact of online education.

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