A Preliminary Study of Changes in Online Graduate Business Student Perceptions Over a Course

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ABSTRACT

Prior research indicates that as students experience more online courses, their perceptions of the online environment compared to the face-to-face learning environment change. This study evaluates the perceptual changes for graduate students *over a single course*. Over the semester, graduate student perceptions with respect to motivation, difficulty and cheating changed, while student perceptions of self-directed preference, independence, time and cost investment, difficulty, schedule flexibility, happiness and appropriateness of online education did not. In general, differences in perceptions between novice and more experienced learners did not exist. These results have implications for both instructors and administrators.

Keywords*:* Student perceptions, online, graduate students

LITERATURE REVIEW

As indicated by a recent Babson Survey, the use of online education in higher education is on the rise, and many academic administrators believe that online education learning is the same or superior to those in traditional face-to-face (FTF) classrooms (Allen & Seaman, 2013). Contrastingly, others argue that due to intrinsic differences, learning through online education does not replicate the learning in the FTF classroom (Bejerano, 2008). With this increase in online courses, several studies evaluated both student perceptions and student performance in the online environment (e.g. Allen & Seaman, 2013; Braunscheidel, Fish & Shambu, 2013; Fish, 2015; Fish & Snodgrass, 2014, 2015; Perreault, Waldman, Alexander & Zhao, 2008; Tanner, Noser, and Langford, 2003; Tanner, Noser, Fuselier & Totaro, 2004a; 2004b; Tanner, Noser, Totaro & Birch, 2006; Tanner et al., 2009). Perception and performance results are mixed.

According to theory, the more someone is exposed to and uses a particular method or model, the more adept they become in using it (Dobbs, Waid & del Carmen, 2009; Tanner et al., 2003; Tekinarslan, 2011). Several studies demonstrated differences between students who have taken online courses and those who have not (Dobbs et al., 2009; Tanner et al., 2003). Students not taking online courses perceive that faculty have low expectations of online students, contrary to online students that perceive instructors as having higher expectations (Dobbs et al., 2009). In a study of business students – regardless of whether the student took or did not take online courses, students favored FTF courses; however, most online respondents only took one course (Fish & Snodgrass, 2014). As students take more courses, studies evaluating student's perceptions of online courses demonstrate an increasing acceptance of online as being equal to or better than FTF (Dobbs et al., 2009; Fish & Snodgrass, 2014; Mortagy & Boghikian-Whitby, 2010; Perreault et al., 2008; Tanner et al., 2003). Using the same survey instrument as this study, results indicated that as business students took more courses, their perceptions of the online environment improved, and their perception that online courses were more difficult than traditional classes increased (Fish & Snodgrass, 2014). Therefore as shown in many studies (Dobbs et al., 2009; Mortagy & Boghikian-Whitby, 2010; Perreault et al., 2008), as students experience in the online environment increases *over time*, their perceptions improve with increasing exposure to the online environment. Prior research indicates that students need to complete at least 5 online courses before they perceive that they learn more in the online environment than FTF (Dobbs et al., 2009). A literature search revealed that no research to date has evaluated the change in business student perceptions of the online environment *over a single online course. Do students' preconceived perceptions prior to a course continue throughout the course, or do they change significantly? Does their prior experience in online learning impact upon their perceptions?* These questions are the focus of this study.

Two streams of research in the online environment exist: student characteristics (such as motivation, discipline and independence) and program characteristics (such as academic rigor or the ease of cheating) (Fish & Snodgrass, 2014). A survey instrument that includes these two streams of research, developed and used in prior studies, will be used in this study (Fish & Snodgrass, 2014, 2015). The previous studies compared undergraduate, graduate students and international students who experienced online education versus those who did not. The results of previous studies are briefly reviewed here.

Student Characteristics. In the online environment, student emotions impact upon a student's ability to learn, and student perceptions should be realistic (Tanner et al., 2009). In FTF classrooms, instructors recognize, react and modify their lessons based upon real-time feedback they receive from the students (Reilly, Gallager-Lepak, & Killion, 2012); however, this feedback does not exist in today's online environment. Studies that analyze online and FTF student perceptions are mixed, and results often conflict with other studies. Student characteristics that may impact upon a student's ability to learn include student motivation, discipline, self-directed learning environment, independence, time and cost investment, and preference and happiness in the online or FTF learning environment. Also, whether a student feels the environment – online or FTF – is appropriate may impact upon his ability to learn.

Motivation, Discipline, Self-directed, Independence, and Happiness. In general, when students find the material to be relevant and the content interests them, they are more motivated (Adler, Milne & Stablein, 2001). With regard to student motivation and learning environment, results are mixed. Some studies indicate that the online environment increases critical thinking and work motivation (Larson & Sung, 2009), while other studies indicate that the online environment offers low motivation for students to learn (Fish & Snodgrass, 2014; Maltby & Whittle, 2000) with retention issues (Abouchedid & Eid, 2004) and low student satisfaction (Muilenburg & Berge, 2005). In our prior study, both online students and FTF students (who never experienced online) indicated that they were more motivated in the FTF environment (Fish & Snodgrass, 2014).

In order to be successful, online students should be disciplined (Schott et al., 2003) as students that are not self-motivated and committed will not be happy in the online learning environment (Rivera & Rice, 2002). In our prior study, online learners and FTF learners felt the discipline required in their group is 'equal to or more' than the other instructional method (Fish & Snodgrass, 2014). Also, once online students experience the online environment, they are 'okay' with it but do not appear to be as happy as those who are entrenched in the traditional FTF classroom. Online learning requires self-directed learning and autonomy, but self-discipline and motivation are also required to complete the course (Gifford, 1998; Kearsley, 2002). In our prior study, both FTF and online students felt the independent learning was about the same for both learning environments, but slightly favored their own learning environment (Fish & Snodgrass, 2014). Our previous results found that online students prefer the discipline and independence of online learning over FTF classes, but are indifferent to the self-directed online learning environment (Fish & Snodgrass, 2014). Some students always prefer to work independently (Hiltz & Turoff, 2005). Cultures may regard independent versus collective work differently; for example, U.S. students prefer independent work, while their Chinese counterparts prefer group work (Lin. Lee & Magjuka, 2010).

Time Investment and Cost Investment. Results regarding time and cost investment in the online environment are mixed as some studies indicate that students perceive online learning to be more time consuming (Dobbs et al., 2009; Gifford, 1998; Perreault et al., 2008), indicate student indifference (Fish & Snodgrass, 2014), or report FTF students studying more than their online counterparts (Horspool & Lange, 2012). Good time management skills are critical in online learning (Cheung & Kan, 2002). Student beliefs regarding online education may also include the educational benefit and monetary cost associated with a course (Chawla & Joshi, 2012). Traditional FTF students felt the value from an online course would be less than FTF (Chawla & Joshi, 2012); however, in our prior study, online students were indifferent to cost investment (Fish & Snodgrass, 2014).

***Preference and Appropriateness*.** In our prior study, while online and FTF students both felt online courses are appropriate at the university, both groups preferred FTF classes (Fish & Snodgrass, 2014).

Program Characteristics. Students perceptions may be shaped by online and FTF program characteristics, such as course difficulty, cheating, schedule flexibility, student interaction and instructor interaction as well as the various technologies and activities used in the course. Whether students are properly prepared through formal training is another factor that may impact upon student perceptions. Research on student perceptions on program characteristic also produced mixed results as outlined below.

*Difficulty***.** Student perceptions on course difficulty vary as some studies indicate FTF courses are easier than online (Dobbs et al, 2009), while others indicate online courses are easier than FTF (Armstrong, 2011). In our prior study, students indicated a dislike towards online learning (versus FTF) for difficulty (Fish & Snodgrass, 2014).

*Schedule Flexibility***.** A common reason online students choose to take online courses is flexibility and convenience (Chawla & Joshi, 2012; Grandon, Alshare, & Kwun, 2005; Horspool & Lange, 2012; Perreault et al., 2008), the

ability to self-control the learning environment (Armstrong, 2011), avoiding a commute to campus, and work demands (Horspool & Lange, 2012). In our prior study, online students preferred the schedule flexibility afforded through online classes, while traditional FTF students did not perceive the schedule flexibility benefit associated with online classes (Fish & Snodgrass, 2014).

Academic Integrity - Cheating. Rumors surrounding online cheating abound. Student perceptions on cheating indicate that it is easier to cheat in the online than FTF environment (Lanier, 2006; Fish & Snodgrass, 2014).

*Student Interaction and Instructor Interaction***.** With respect to 'people' interaction, results are mixed. Some studies indicate online courses enhance learner participation and interactivity (Maeroff, 2004), and others highlight a general feeling of 'disconnect' due to the lack of FTF interactions (Stodel, Thompson & MacDonald, 2006) or student distress (Hara & Kling, 2003). When online students do not perceive that they are part of the 'group', they tend to be disgruntled and report inadequate student communication (Horspool & Lange, 2012), a lack of student interaction, and a general unwillingness of other online learners to participate in group assignments (Maeroff, 2004). Studies offer mixed results as some indicate that online students like the online interaction with other students more (Wang & Morgan, 2008) while others indicate they like it less (Horspool and Lange, 2012) than FTF.

When students perceive faculty as missing, they perceived the course quality as poor and vice versa (Armstrong, 2011). With respect to instructor interaction, mixed results exist again. Some studies indicate that online interaction with the instructor is weaker (Wang & Morgan, 2008), indifferent (Horspool & Lange, 2012) or equal or even more positive than FTF (Boyd, 2008). In our prior study, online and FTF learners preferred the student and instructor interaction in the FTF classroom over online (Fish & Snodgrass, 2014).

Course Activities and Prior Online Training. Online education requires additional student and instructor skills (Tekinarslan, 2011), but it offers greater access to additional learning resources (Sener & Stover, 2000). For the most part, online and FTF students appear technically well-equipped and comfortable in taking online courses as few report significant communication issues (Horspool & Lange, 2012). Early research favored training or tutorials for online students prior to online enrollment (Perreault, Waldman, Alexander, & Zhao, 2002). Recent research indicates that students without online training felt they were adequately prepared (Perreault et al., 2008). In our prior study, over 90% of the students who completed online courses did not complete any formal online training prior to taking the online course (Fish & Snodgrass, 2014).

As for valuable online activities, students perceived video modules, quizzes and the textbook as valuable to the learning environment regardless of whether the course was online or FTF (Horspool & Lange, 2012). Other researchers indicated that students found the most used and valued online activities include lecture/lab notes, unit learning resources and information, online discussions, contacting lecturers/tutors and assignments (Palmer & Holt, 2010). Students perceived receiving assignment feedback from the instructor and reviewing unit progress as important to online learning (Palmer & Holt, 2010).

Literary Conclusions for Study. While not comprehensive, this literature review clearly indicates that ambiguity exists in the debate between online and FTF education. Research also indicates that a student's experience with online education changes over time, with a particular focus on 5 online courses as a critical point in perceptual development. This research seeks to explore the time frame associated with perceptual changes by examining changes over one semester at a mid-sized, Jesuit, Catholic, business school with a focus on business.

METHOD

At an AACSB accredited, Jesuit, Catholic University in the northeast, students in an online graduate business course in global supply chain management participated in pre-course and post-course surveys regarding their perceptions of online versus FTF education. Graduate students completed the pre-course survey over the weekend prior to the start of class, while they completed the post-course survey over exam week. Sixteen students completed the course; however, only 13 students completed both the pre-course and post-course surveys. (Note, while all students completed the pre-course survey, to encourage participation in the post-course survey, extra credit towards a term paper was promised for 90% or more participation. Unfortunately, the students failed to reach this level of participation.)

The online course was the first online course taught by the instructor, who taught for 22 years prior at the institution in FTF classes and the FTF version of the online course 11 times prior. The instructor completed the university's online training course in preparation for the course. The student weekly activities included completing the required textbook readings in conjunction with a weekly handout highlighting critical material, answering study group questions (worth 25% of student's final grade) and individual questions, and completing a weekly quiz (worth 20% of student's final grade and administered through the Desire2Learn course management system). Additional readings and/or Executive Briefings with additional individual and study group questions were also included in the course as material warranted. All weekly material, except the quiz, was available on Sunday, 12:00 a.m. The study group questions were due on Wednesday evenings at 11:59 p.m., and general instructor feedback on the questions appeared at 6:00 a.m. on Thursday mornings. The groups consisting of 4 students each were assigned and rotated four times throughout the semester. At the end of each rotation, information on the group performance was gathered and grade adjustments could be made. (The instructor never needed to address group issues as no major problems were indicated.) The weekly quiz became available at 12:00 p.m. on Thursday and was due by Saturday, 11:59 p.m. Quizzes, which were timed, consisted of multiple choice questions, mapping and short answer questions, and the lowest 2 scores (out of the 15 were) dropped. In addition to the weekly activities, 5 assignments (worth 30% of student's final grade) were due throughout the semester. Students also completed a term paper (worth 25% of the student's final grade) on a student-proposed, instructor-approved topic.

Based upon prior research as noted above, the instructor administered a survey similar to other studies (Fish & Snodgrass, 2014, 2015) through the University course management software – Desire2Learn. The pre- and post-perception surveys questions included questions on motivation, discipline, self-directed, independent, time and cost investment, student and instructor interaction, difficulty, cheating, schedule flexibility, course activity preference, preference for online versus FTF education, happiness, and the appropriateness of online education at the university (See Appendix). In the pre-course survey, students answered additional questions on whether they had taken a prior FTF course with the instructor, the number of online courses taken prior not at the university, the number of online courses taken prior at the university, and whether they had taken an online preparation course at all, through the university, textbook publisher or other. In addition to specific questions regarding the handouts, quizzes, additional readings, Executive Briefings, assignments, study group questions, the individual term paper, textbook, final grades, office hours, and other potential activity changes to the course, students were surveyed on the number of hours they spent working on course material each week (excluding two very intense weeks noted prior to the course by the instructor). Survey information was codified as noted in parentheses in the Appendix, and the data was entered into an EXCEL spreadsheet for analysis.

ANALYSIS

The pre-course survey indicated that out of the 16 students that took the course only 3 had taken a course prior with the instructor. In the pre-course survey, five students indicated that they never took an online course, 1 student took 1 online course, 3 students took 2 online courses, 1 student took 4 online courses, 2 students took 5 online courses and 1 student took 6 online courses. The pre-course survey indicated that students took an average of 2.15 online courses (σ = 2.34). Unfortunately, in the pre-course survey only 3 students commented on student interaction, instructor interaction and activities that increased or decreased their understanding of course material so a comparison between pre- and post-perceptions on these parameters could not be made.

As shown in Table 1, results (student t-test, one-tail, pairwise) indicate that students perceptions remained the same for all parameters except motivation (p=.04), difficulty (p=.05) and cheating (p=.03). A slight change in perception for discipline required was also noted (p=.07). Students indicated that they were indifferent as to motivation between the two environments prior to taking the course; however, following the course, they indicated that they were less motivated in the online environment. With respect to difficulty, students felt that the online environment was more difficult – and perceived it to be significantly more difficult following the course. Prior to taking the course, students perceived that the online environment would be easier to cheat in; however, following the course, they were relatively indifferent. Similarly, prior to the course, graduate students perceived the online environment to require more discipline; however they were more indifferent to the discipline required following course completion. With respect to enjoying the self-directed online environment, students tend to dislike it. However, they tend to enjoy the independence associated with online learning slightly more than the FTF classroom. Graduate students perceive the time investment to be greater online than FTF, which is interesting given that students only spent an average of 5.82 hours per week (σ = 2.77 hours) on course material. In general, students perceived the cost

investment to be slightly less in the online environment. They also noted the schedule flexibility associated with online courses. In general, students were 'okay' to 'slightly happy' with the online course.

Table 1. Student Pre- and Post-Course Perceptions

Perception	Pre-Course		Post-Course		T-Test
	Average	Standard Deviation	Average	Standard Deviation	
Motivation	3.00	.41	2.54	.78	.04 *
Discipline	3.85	.69	3.46	.78	.07 **
Self-directed	2.64	1.21	2.69	1.44	.39
Independence	3.23	.93	3.31	1.38	.41
Time Investment	3.46	.88	3.85	1.07	.13
Cost Investment	2.62	.65	2.85	1.07	.21
Difficulty	3.23	.73	3.54	.97	.05 *
Cheating	2.54	.66	2.92	.28	.03 *
Schedule Flexibility	4.17	.58	4.00	1.15	.21
Preference	1.77	.73	1.69	.95	.34
Happiness	3.31	.63	3.23	1.17	.39
Appropriateness	1.54	.66	1.46	.66	.36

* $p \leq .05$ ** $p \leq .1$

Five students never changed their mind over the course and indicated that they would've preferred to take the class as a FTF class. Pre- and post-course completion, two students desired an online course, and one student was indifferent. Three students began the course as indifferent between the two environments, but by course completion indicated that they would prefer a FTF course. Two students began the course as indifferent, but by course completion they indicated that preferred the online environment. Before and after course completion, students were divided between online courses being inappropriate and undecided as to whether they were appropriate for the university.

As noted above, student perceptional changes with respect to student and instructor interaction could not be analyzed as too many students did not complete the pre-course survey for these items. Interestingly, post-course completion results indicate that students were relatively indifferent to student interaction ($\mu = 2.92$, $\sigma = .76$), while they tended to dislike the instructor interaction in the online environment ($\mu = 2.69$, $\sigma = .85$). Student-to-student interaction consisted of weekly completion of the study group questions instead of discussion board posts. As noted previously, no online classes were held, and instructor-student interaction consisted of online office hours and email. Interestingly, only one student ever attended the online office hours.

After course completion, 5 students indicated that the discussion board/study groups (5) or homework assignments (3) contributed the most to their understanding of the material. The majority of graduate students (9) indicated that they would not remove any activities from the current course offering, while 3 students indicated that they felt the additional readings decreased their understanding of course material.

Online Perceptual Differences with Online Experience. Since only 16 students took the course, subdividing and statistically comparing student perceptions by the number of online courses that students have taken is not statistically acceptable. While the numbers are small, comparing the perceptions of students without prior online experience ('novices'; 5) to those with online experience ('experience', 8) reveals very little difference in perceptions between the two groups as shown in Table 2. As expected, the number of online courses are statistically different between the two groups (p=.00). The only perception that was statistically different between the two groups was post-course student interaction (p=.03). Novices liked the student interaction in the online environment more than the FTF environment ($\mu = 3.4$, $\sigma = .55$) more than their more experienced peers ($\mu = 2.63$, $\sigma = .74$). Slightly significant differences were noted for the pre-course perception regarding self-directed (p=.10) and happiness (p=.09), and post-course average number of hours invested in the course (p=.10). Prior to the course, novices noted that they disliked the self-directed nature of the online environment more than the FTF environment ($\mu = 2.40$, $\sigma = 1.14$) slightly more than their experienced peers who were more indifferent ($\mu = 2.88$, $\sigma = 1.64$). Prior to taking the courses, novices were slightly more positive with respect to expected happiness in the online environment ($\mu = 3.60$, $\sigma = .55$) than their experienced peers ($\mu = 3.13$, $\sigma = .64$). After completing the course, novices

reported spending slightly fewer hours (μ= 4.5, σ =1.32) than their experienced peers (μ= 6.31, σ =3.07). In general, very little difference in student perceptions existed between the novices and those who had prior online experience.

Table 2. T-test Comparison of Students without versus Students with Prior Online Experience

Perception	Pre-course	Post-course
Motivation	.5	.33
Discipline	.15	.30
Self-directed	.10 **	.28
Independence	.11	.41
Time Investment	.41	.45
Cost Investment	.47	.44
Student Interaction	-	.03 *
Instructor Interaction	-	.18
Difficulty	.45	.22
Cheating	.11	.18
Schedule Flexibility	.23	.22
Preference	.19	.20
Happiness	.09 **	.31
Appropriateness	.39	.31
Average Number of Hours Invested in Course	-	.10 **
Total Online Courses	-	.00 *

* $p \leq .05$ ** $p \leq .10$

However, as shown in Table 3, the correlations between student perceptions and self-reported average weekly hours invested in the course yields some interesting results. A moderately negative relationship exists between average hours invested in the course and the self-directed learning environment, independence, preference and happiness. After the course, students continued to demonstrate this moderately negative relationship with time investment and cheating, but had a moderate positive relationship with time and cost investment in the online environment. Essentially, as students invested more time into the course, they enjoyed the self-directed, independent learning environment online less, and they preferred the FTF classroom. With respect to cheating, as graduate students invested more time into the course, they felt it was significantly easier to cheat online!

Table 3. Correlations between Perception and Average Number of Hours Invested in Course

Perception	Average Weekly Hours Invested in Course	
	Pre-course	Post-course
Motivation	.08	-.37
Discipline	.20	-.08
Self-directed	-.58	-.38
Independence	-.58	-.60
Time Investment	-.16	.47
Cost Investment	.12	.76
Difficulty	-.20	-.14
Cheating	-.36	-.80
Schedule Flexibility	.02	.06
Preference	-.59	-.38
Happiness	-.58	-.33
Appropriateness	.43	.08

DISCUSSION

The key focus of this study is to evaluate graduate student perceptual changes over a semester online course at a business school with a focus on teaching. Students' preconceived perceptions did not change except on motivation,

difficulty and cheating. The instructor took great care in ensuring that the online course mirrored the difficulty and demands of prior FTF class offerings. There was never a 'break' in the semester as students were expected to complete the required work regardless of holidays. Perhaps as the semester wore on, graduate students became less motivated to the work alone. Since the majority of the work is done alone, they may have realized that the difficulties of working alone to 'figure it out' versus being in a traditional classroom. With regard to the timed quizzes, students may have realized that they couldn't just 'look up the answer' but actually had to learn the material similar to a FTF class. Similar to other studies (Chawla & Joshi, 2012; Fish & Snodgrass, 2014; Grandon et al., 2005; Horspool & Lange, 2012; Perreault et al., 2008), graduate students overwhelming favored online education for the schedule flexibility that online offers. Ironically, the results indicated that graduate students felt their time investment was significantly greater online than FTF, but they only reported spending an average of 5.82 hours on the course! A traditional FTF class has a 2.75 hour class associated with it, along with readings, studying, problem solving and homework to complete, which probably takes the average student longer than 6 hours per week. Perhaps since the online student is 'alone' the majority of time, they feel the time investment more than in a FTF class.

Significant differences between novices and more experienced online graduate students did not exist with the exception of post-course student interaction. Novices liked the student interaction in the online environment significantly more than their more experienced peers. Since novices had not experienced this constant student-to-student interaction in the FTF classroom, they enjoyed it more than their more experienced counterparts who had this experience in the past. Perhaps the 'novelty' wore off for the experienced online students. However, one should note that the majority of students who participated in the study had less than 2 online courses prior, and only 3 students took 5 or more courses prior. In keeping with prior results (Dobbs et al., 2009; Fish & Snodgrass, 2014), it's not surprising to find that the graduate students in this study tend to favor FTF education.

Courses given to instructors to assist them with learning how to teach online often indicate that students will be similarly prepared through training. However, in both this study (where only one student had formal training) and a prior study (where over 90% of students out of 111 indicated no formal training (Fish & Snodgrass, 2014)), the majority of students did not take any online training courses. Similarly, other research indicates that students without online training felt they were adequately prepared (Perreault et al., 2008). While exposing a student to tools and techniques, online training also impacts upon a student's perceptions and expectations. So, while students felt that they were adequately prepared to participate in the online course, it is interesting to note that their perceptions still favored the FTF classroom. If potential online students are required to take online preparatory courses, perhaps their expectations will be more realistic.

Interestingly, as the hours students invested in the course increased, their preference for the self-directed, independence, and happiness in the online environment decreased. Perhaps, the more time they invested *alone*, the more they longed for the more personal interaction in a FTF classroom. As graduate students invested more time into the course, they felt it was significantly easier to cheat online. Perhaps as students invested more time into the online course, they find and possibly develop methods to cheat.

The post-course survey indicates that graduate students were generally happy with the course structure as most students felt all of the activities added to their learning experience. Interestingly, most graduate students favored study groups – with personal interaction – and assignments – done individually – as adding the most to their learning experience. Obviously, students recognized the importance of learning from others, but, they also value individual assignments.

A few limitations in this study exist. First and most importantly, the number of students that participated in the class was relatively small, with only 13 completing both the pre- and post-course surveys. Hopefully, future offerings of the class will include more data. A more robust sample may be subdivided into relevant subgroups and offer more complex statistical analysis. Unfortunately, since online courses are limited to 20 students at the University, the sample size by class will remain small unless additional sections are offered, which may add complexity due to section differences. The results and discussion here should be viewed as a 'preliminary' study but should offer insight for other instructors and researchers. Secondly and unfortunately, since few students completed the pre-course survey questions regarding student and instructor interaction and activity preferences, the study was unable to analyze these perceptual changes. Hopefully, future studies will be able to gather this information.

Similar to our prior study (Fish & Snodgrass, 2014), graduate students perceptions tended to favor FTF education in both the pre-course and post-course survey. Assuming as administrators do that online education is equivalent to

FTF (Allen & Seamen, 2013), then students should be indifferent to all of the factors surveyed. This study and others indicate that this is not the case. Clearly, the results indicate that students with relatively little exposure to the online environment (less than 5 online courses) – and no formal online training - prefer FTF courses at the teaching university. The preliminary results comparing pre-course and post-course perceptions indicate that students retain their perceptions that they have of online education over a course, and their preconceived perceptions did not change.

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Appendix A Student Perceptions Survey

This is a core area and concentration course. How much of the MBA program have you completed to date?
Are you currently working a full or part-time job, and if so, where and what is your position?
Some students did their undergraduate degrees here at the university or took a foundation level course with me. Did you take a course with me in the past? Yes (1) No (0)
How many online courses have you taken before (not including the university)?
How many online courses have you taken before at the university?
Prior to taking an online course, did you take a course to prepare you for the online environment? I didn't take a preparatory course. (1) I participated in the university's online training. (2) I participated in a book publisher's online training. (3) I used alternative tools to prepare to learn online. (4)

Pre-Course and Post-Course Perception Questions

Online Format: This was the first time this course will be offered online (instead of in the Face-to-Face classroom). With this in mind, I would like to understand your expectations in the online environment more. Please complete the following statements:
I am _____ **motivated** in online courses than face-to-face courses. (1) Significantly Less (2) Less (3) Equally (4) More (5) Significantly More
I find the **discipline** required in taking online courses to be ____ than in face-to-face courses. (1) Significantly Less (2) Less (3) Equally (4) More (5) Significantly More
I enjoy the **self-directed** online learning environment__than the interaction in face-to-face courses. (1) Significantly Less (2) Less (3) Equally (4) More (5) Significantly More
I enjoy the **independence** associated with the online learning environment____than the interaction in face-to-face courses. (1) Significantly Less (2) Less (3) Equally (4) More (5) Significantly More
I find online courses require_____**time investment** in the course than face-to-face courses. (1) Significantly Less (2) Less (3) Equally (4) More (5) Significantly More
I find online courses **total costs** are _____than face-to-face courses. (1) Significantly Less (2) Less (3) Equally (4) More (5) Significantly More
I _____the **interaction with other students** in the online environment compared to the face-to-face course environment. (1) Significantly Dislike (2) Dislike (3) Equate(4) Like (5) Significantly Like
I _____the **interaction with the instructor** in the online environment compared to the face-to-face course

environment. (1) Significantly Dislike (2) Dislike (3) Equate (4) Like (5) Significantly Like
I perceive online courses to be_____in **difficulty** than face-to-face courses. (1) Significantly Easier (2) Easier (3) The Same Difficulty (4) Harder (5) Significantly Harder
I find its' _____to **cheat** in the online environment than in face-to-face courses. (1) Significantly Easier (2) Easier (3) The Same (4) Harder (5) Significantly Harder
I enjoy the **schedule flexibility** associated with the online learning environment_____than the interaction in face-to-face courses. (1) Significantly Less (2) Less (3) Equally (4) More (5) Significantly More
In the online environment, I feel the most critical activity that increases my understanding of the course material is: (1) Discussion boards/Study Groups (2) In-class sessions (3) Additional Readings (4) Homework /Assignments (5) Videos / Executive Briefings (6) Instructor office hours (7) Instructor chat / email (8) Other students (9) Problem Scaffolding & Hints (10) None of the activities helped at all.
In the online environment, I feel the most critical activity that decreases my understanding of the course material is: (1) Discussion boards/Study Groups (2) In-class sessions (3) Additional Readings (4) Homework /Assignments (5) Videos / Executive Briefings (6) Instructor office hours (7) Instructor chat / email (8) Other students (9) Problem Scaffolding & Hints (10) None of the activities helped at all.
Would you prefer to take the class in a traditional face-to-face environment? Yes (1) Undecided(2) No (3)
I am _____with the online course environment for learning. (1) Not very happy (2) Not happy (3) Okay (4) Happy (5) Very happy
Given this institution, do you think online courses are appropriate? Yes (1) Undecided(2) No (3)
The course is typically offered in a Face-to-Face environment. Why did you choose to take the course online?

Additional Post-Survey Questions:

In my opening comments about the course, I indicated that weeks 2 and 3 would be very intense; however, the other weeks would be more manageable. In general, how many hours per week (excluding weeks 2 and 3) did you spend on course material?