Quantitative Research Proposal:

Individuals and Teams in Business Simulation

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Quantitative Research Proposal: Individuals and Teams in Business Simulations

Chapter 1

Introduction

Participation in a multi-week computerized business simulation has become an important part of business education at both the undergraduate and graduate levels. The Association to Advance Collegiate Schools of Business (AACSB), the leading accreditation agency in business education, has recommended that its members use business games as part of their accreditation process. Business schools must submit evidence to meet Assurance of Learning standards to maintain their accreditation, to ensure that their programs result in positive student learning outcomes. As a result, each of the major business simulation games has developed enhancements that will document student outcomes and present them as evidence of learning (Wolfe, 2016).

Each of the major business simulations immerses students in the operation of a business. The scenarios differ, as do the game mechanics, but the goal is to let students gain experience in making complex decisions across all functional areas of a realistic corporation. Some universities incorporate simulations of this type into multiple courses in the curriculum, others use simulation only once, often in the capstone course for the degree. As educators set these simulations up for their students, they must make several important decisions: how to create the most effective teams, how to ensure that each team member contributes to the simulation, how many practice rounds and competition rounds to schedule, and how to introduce the simulation. In the case of the Capsim suite of simulations, they also have the option of running the simulation as a Footrace, with each student running their own company, instead of forming teams. In this case, each student competes against five computer-generated companies, rather

than against classmates. Footraces are often used with large class sizes, or in online courses. Instructors may also choose a Footrace just because they prefer the format (Capsim, n.d.).

Statement of the Problem

Multi-week business simulations have become an important part of business education. Accrediting agencies rely on evidence from these simulations for assurance that business schools are providing an effective education, and preparing students for the world after graduation. As of 2008, approximately 95% of AACSB accredited institutions included a simulation as part of their curriculum (Forsyth & Anastasia, 2016, p. 85).

Institutions use the Assurance of Learning results from business simulations to diagnose areas of improvement in their curriculum. However, there may be other factors to consider which impact simulation scores. For example, student motivation, team dynamics, and other psychological and interpersonal characteristics influence performance. The choices made by universities and faculty in how to implement the simulation are also important. This study will examine some of those choices, and the impact of those choices on scores on the simulation comprehensive exam.

Universities want to ensure that their graduates are fully prepared for the working world, and they also want to maintain their accreditation. It is important to determine which choice of features in a business simulation will result in the optimal learning experience for students. This will enable the faculty to make informed decisions and allow the university to meet each of these goals.

Purpose

The purpose of this study is to explore the relationship between students' individual performance on a business simulation comprehensive examination and several factors, including

the format of the simulation experience, the length of the simulation experience, and the number of previous business simulations experienced by the student. Participants in this study will be undergraduate students in at least three universities who have completed a multi-week business simulation and subsequently completed a business simulation comprehensive examination.

Research Questions

This study will focus on three major questions:

1. What is the relationship between student performance on the comprehensive examination and the format of the initial business simulation, either team or individual?

2. What is the relationship between student performance on the comprehensive examination and the number of weeks in the initial business simulation?

3. What is the relationship between student performance on the comprehensive examination and the number of prior business simulations experienced by a student?

Chapter 2

Introduction

Since the 1950's, computerized simulation has been a popular technique in business education. Early games were run on mainframe computers, using input from IBM punch cards. The advent of the personal computer in the 1980's allowed games of greater complexity and better user interfaces, while decreasing the cost of the simulations (Faria, Hutchinson, Wellington & Gold, 2009).

Today's business simulations are complex and immersive. They are designed to bring together all the disciplines in a typical business education, and to allow participants to experience what it is like to run a multi-million-dollar company.

Literature Review

Business schools view accreditation as a necessity. It validates the quality of the education offered by the institution, and helps to recruit high quality faculty. There are several accreditation agencies, but the most prestigious in the business world is the Association to Advance Collegiate Schools of Business (AACSB) (Miles, Franklin, Grimmer & Heriot, 2014). In reaction to recent research findings which were highly critical of the quality of education in American business schools, AACSB revised its accreditation standards. The new standards include a more stringent Assurance of Learning (AoL) standard, designed to ensure that business schools engage in a continuous improvement effort, based on evidence of student results (Miles et al., 2014) The revised standards, released in 2013, also included a recommendation that business schools use a business simulation to help meet the AoL standard (Wolfe, 2016). As a result, each of the three major business simulation platforms introduced enhancements that would capture data that would be useful for business schools in preparing their AoL documentation. These top three simulations include The Business Strategy Game, Capsim Capstone, and Marketplace Live. Each of these simulations approaches the task in a slightly different way, and has slightly different features (Wolfe, 2016).

Most business simulations are designed to be played as a team. Learning to work effectively in a team is an important outcome for students, as many of today's jobs are structured in a team format. The team structure, along with critical thinking skills and combining skills and concepts from across disciplines, make simulation a tool which helps students transition from the academic world into future employment (Seaton & Boyd, 2008). Ellington and Dierdorff (2013) studied individual learning during team activities. This study used the team-based Capstone

simulation, a Capsim product, to examine the team performance, and the individual Comp-XM simulation, which is the Capsim comprehensive examination, to measure individual performance. The study focused on the psychological characteristics of metacognition and self-efficacy, and their interaction with team dynamics. This study showed that the key to individual learning in the team setting was self-efficacy, the players' belief that they are capable of success in the simulation. They found that team success and individual success were closely related, and that success in the team setting tended to increase individual confidence and performance in the individual simulation (Ellington & Dierdorff, 2013).

Wolfe (2016) conducted a study to validate whether the team-based Business Strategy Game simulation was adequate to measure student learning. Wolfe's study found that the simulation did meet the four conditions he established for acceptance: the game allows for participant engagement, participants who are more engaged in the game attain higher scores, the game rewards participants who apply the theories of the discipline, and faster, correct decisions are rewarded. Wolfe also found a significant limitation in his study, in that 27% of the students enrolled in the course did not purchase a license for the simulation. Even though they were assigned to a team, they were unable to view the simulation and enter decisions directly. This means their engagement was limited to what they could do sitting next to a teammate, and implies that they may not have participated at all (Wolfe, 2016).

Kilburn and Kilburn (2012) studied team dynamics in college seniors using the Capsim Capstone simulation. They noted that several studies have been conducted that show the benefit of using team-based activities in education, as each group member brings different knowledge and perspective to the task. However, groups can also be dominated by one strong member, and can be hampered by groupthink. They proposed that the number of times a participant logged on

to the simulation was an indicator of the participant's engagement in the activity. They

conducted a study to determine if the number of logons to a computerized simulation could be

used to predict scores. They studied two variations of this question, one using the average

number of logons by team members as the independent variable, which they called the group

unit. The study found no predictive pattern in this group. The other variation involved using the

number of logons of the most active member of the group as the independent variable, which

they called the individual unit. The study results showed a strong predictive relationship between

the number of logons and group performance in the individual unit analysis. The researchers

concluded that educators should distribute talent as evenly as possible though teams. They also

noted that it would be worthwhile to study the impact of key individuals in group settings

(Kilburn & Kilburn, 2012).

Forsyth and Anastasia (2016) conducted a study of the relationship between performance

on the Capsim Foundation simulation, and the Comp-XM exam. The Foundation simulation is a

less complex version of the Capstone simulation, with fewer products and market segments, but

the same mechanics. Their study looked at Comp-XM results by MBA students at one university

over five semesters, and found that their scores were lower than the national average. In three of

the five semesters, some of the students participated in the business simulation in Footrace mode,

which means they completed the simulation as individuals, not as members of teams. This is a

close approximation of the conditions during the Comp-XM exam. The students who

participated in the Footrace achieved higher scores on the comprehensive examination than the

group who participated in the team format. There was also an observation that longer

participation in the initial simulation would lead to higher Comp-XM scores. One of the key

findings in this study was that students need to be prepared adequately in the preceding courses,

to be successful in the capstone course and its simulations. Their other key finding was that a full eight weeks of the initial simulation was closely related to better scores on the Comp-XM comprehensive examination (Forsyth & Anastasia, 2016).

Summary

Business simulation experiences are an important part of business education today, and will be important in the future. Both team dynamics and individual psychological factors play a part in student success in these activities. The decisions made by a university in choosing a simulation, as well as the individual choices made by faculty in administering the simulation, are also an important factor in the student experience.

Chapter 3

Introduction

This study will explore the relationship between several independent variables, including student performance on a business simulation, the length of that business simulation, and previous experience with such simulations, and a single dependent variable, student performance on a comprehensive simulation examination. The study is structured as an explanatory correlational study, which examines "the extent to which changes in one variable are reflected in changes in the other" (Creswell, 2014, p. 341). In accordance with this design, all data will be collected at a single point in time, and all participants will be evaluated as a single group (Creswell, 2014).

The primary source of data for the study will be reports generated by the instructor through the simulation instructor dashboard. This data will be more complete and reliable than self-reported scores obtained from participants. Supplemental information will be collected from the instructor and the student participant using questionnaires.

Research Design

This study will test the theoretical perspective that the choices made by the university and the instructor with respect to the parameters of the business simulation have a significant influence on student performance. If students learn better in a team setting, then students who participate in a team-based simulation will have higher comprehensive examination scores. On the other hand, if students learn better by having sole responsibility for all the decisions in business simulation, then students who participate in an individual simulation will have higher comprehensive examination scores. These possibilities will be evaluated by the first research question in the study:

1. What is the relationship between student performance on the comprehensive examination and the format of the initial business simulation, either team or individual?

Other instructor choices may have an impact on student performance. It is somewhat intuitive that students with more familiarity with the business simulation will perform better on the comprehensive examination. Therefore, if students play more rounds in the business simulation, it is expected that they will have higher comprehensive examination scores. Similarly, if students have previous experience with business simulations from the same provider, it is expected that they will have higher comprehensive examination scores. These possibilities will be evaluated by the second and third research question in the study:

2. What is the relationship between student performance on the comprehensive examination and the number of weeks in the initial business simulation?

3. What is the relationship between student performance on the comprehensive examination and the number of prior business simulations experienced by a student?

The business simulation and comprehensive examination that will be utilized for this study is the Capsim Capstone simulation and the Capsim Comp-XM comprehensive examination. These products were chosen because Capstone is one of the industry leaders in the business simulation market. In addition, instructors can choose to administer the Capstone simulation as a Tournament, in which students play in a team, or as a Footrace, in which students play as individuals. The two options are identical, except that Tournament teams play against other teams in their class, while Footrace participants play against five computer-generated teams. The Comp-XM comprehensive examination is always administered to individual participants. It consists of four rounds of simulation, using a scenario that differs from Capstone. In addition, participants answer fifty objective questions drawn from each of the disciplines in the simulation. The Comp-XM examination is optional, but in 2016, over 40,000 students completed the examination. To use the Comp-XM examination, the class must also complete the Capstone simulation (Capsim, 2017).

The ideal university to provide data for this study will have several course sections using the Capstone simulation and the Comp-XM comprehensive examination, with some of those sections structured as a Tournament, and others structured as a Footrace. This will assist in controlling for the effects of attending a different university. If this is not possible, universities that use only Tournament format, and others that use only Footrace format, plus the Comp-XM examination, will be included in the study.

The dependent variable, student performance on the Comp-XM examination, will be measured by obtaining the Assurance of Learning report from the instructor of the course. See Appendix A for a sample of this type of report. For each of the independent variables a different source will be utilized. Capstone scores for both Tournament and Footrace simulations will be

obtained from the instructor of the course, using the Balanced Scorecard, which is available from

the Instructor Dashboard (Appendix B). To link the Capstone scores and Comp-XM scores, an

Industry Roster will be requested from the instructor. This custom report takes less than 2

minutes to generate from the Capstone dashboard, and will contain student name, e-mail,

Industry Identifier, Team Name and Capsim Registration Number (Appendix C). The instructor

will be provided with a brief survey, asking whether they used the Tournament or Footrace

format, as well as how many practice rounds and competition rounds were played (Appendix D).

For the final independent variable, number of Capsim simulations completed prior to the

current semester, a brief survey will be sent to students. This survey will request the participant's

Capsim Registration Number, and ask if the student has participated in a Capsim simulation prior

to the current semester.

Once the data are collected and linked, it will be analyzed using various statistical

procedures to draw conclusions and answer the research questions.

Population and Sample

The population for this study is all undergraduate business students who participated in

the Capsim Capstone simulation and the Comp-XM comprehensive examination. A convenience

sample will be utilized in this study, consisting of all undergraduate business students who

participated in the Capsim Capstone simulation and the Comp-XM comprehensive examination

in at least three universities, in the Fall 2017 semester.

Instrument

Much of the data required for the study will be collected by obtaining standard and

custom reports from the course instructor, using the Capstone Instructor Dashboard and the

Comp-XM Dashboard (see Appendices A, B and C). Supplemental data will be collected from

both the course instructor and the student participant using brief questionnaires (see Appendices D and E).

Procedures

To complete this study, the following procedures will be used:

- Contact Capsim to identify universities which use both Capstone Tournament and Footrace formats in undergraduate courses, and which also use the Comp-XM comprehensive examination.

- Submit the research proposal to the NJCU Institutional Review Board for approval

- Contact the Dean of the Business School for each of the universities identified above, to request their participation in the study. Obtain additional approvals as needed, from the Provost, Department Chairs, and Institutional Review Board from those universities.

- Obtain contact information for faculty using Capsim Capstone in their courses.

- Contact those faculty, explain the study and obtain informed consent, student rosters, Assurance of Learning reports, and Balanced Scorecards, plus survey responses to determine which format was used for each course section, and how many rounds of practice and competition were played.

- Contact students via e-mail, provided in student rosters. Obtain informed consent, and survey responses to determine the student's previous experience with Capsim simulations, and the student's Capsim Registration number.

- Send follow-up e-mails to non-respondents

- Collect and link data using the Capsim Registration number, which appears on both the Comp-XM and student roster reports, as well as the student participant survey.

- Analyze the resulting data using various statistical procedures.

- Produce a final report of the results of the study

- Share the final report with participating universities and faculty members as requested

Conclusion

Both students and faculty see business simulation as an important methodology in the study of business today. Tanner, Stewart, Totaro and Hargrave (2012) found that students view simulation as an enhanced learning experience. In their study, faculty agreed that simulations were valuable as tools, but not necessarily superior to other teaching methods. As simulations become more commonplace in business education, it will become even more important to understand team dynamics and the individual results of these activities.

It is also important to understand to what extent the choices made by the university and the faculty with respect to the structure of the simulation influence student learning, and performance on the comprehensive examination. It is the intent of this study to examine the impact of these choices, and help universities and faculty make choices that will benefit students.

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Appendix A

Sample Assurance of Learning Report

The Business Strategy Game	**Learning Assurance Report**							www.bsg-online.com	
Joyce Meyer	Industry 2 GBA490-001							July 3, 2010	
Percentile Ranking vs. All Simulation Players Worldwide Over the Last 12 Months									
(Population statistics: Students = 32,600, Companies = 10,599, Schools = 360, Countries = 25)									

LEARNING MEASURE / STUDENT / PARTICIPANT	LEADERSHIP SKILLS	COLLABORATION & TEAMWORK	FINANCIAL ANALYSIS	FINANCIAL MANAGEMENT	OPERATIONS MANAGEMENT	MARKETING MANAGEMENT	HUMAN RESOURCES MANAGEMENT	STRATEGIC ANALYSIS & PLANNING	CORPORATE SOCIAL RESPONSIBILITY
Adams, Reanna	64	89	70	79	99	26	19	48	59
Alice, Olive	50	42	70	76	98	37	21	55	42
Barkley, Alannah	88	59	93	63	25	43	50	75	79
Basinger, Prosper	50	89	70	81	40	53	26	67	81
Biery, Estella	88	89	99	81	40	53	26	67	45
Bollinger, Paul	88	59	70	63	25	43	50	75	39
Boyd, Myranda	50	59	93	79	99	26	19	48	71
Countryman, Heath	64	89	93	81	40	53	26	67	78
Downing, Clive	97	92	93	59	46	76	6	82	46
Earhart, Reggie	30	27	70	76	98	37	21	55	68
Faqua, Jade	50	42	38	76	90	45	37	45	56
Harshman, Sera	88	89	93	63	25	43	50	75	80
Hastings, Earl	30	14	19	62	82	23	19	62	67
Huey, Deanne	64	89	70	76	90	45	37	45	74
Lauffer, Alyssia	88	89	93	59	46	76	6	82	51
Little, Meryl	88	89	38	72	5	69	25	73	55
Morgan, Valorie	35	27	38	63	25	43	50	75	79
Morland, Val	35	42	19	62	82	23	19	62	62
Olphert, Paige	30	23	70	79	99	26	19	48	63
Powers, Bob	14	14	38	62	82	23	19	62	58
Pratt, Benny	88	53	38	72	5	69	25	73	47
Sanborn, Elsa	50	42	38	76	90	45	37	45	24
Schuth, Fredrick	50	89	93	76	98	37	21	55	63
Simpson, Wenda	88	89	99	59	46	76	6	82	84
Swabey, Olivia	64	59	70	76	90	45	37	45	70
Thomas, Lenore	14	14	19	76	98	37	21	55	39
Tripp, Isbel	88	89	70	59	46	76	6	82	67
Wall, Aubree	9	10	38	79	99	26	19	48	47
Weldy, Angie	88	89	70	72	5	69	25	73	44
Whitten, Dexter	90	92	70	81	40	53	26	67	70
Yarden, Ed	50	42	70	62	82	23	19	62	88
Class Average	60	61	65	71	62	46	25	63	61

Leadership Skills	Assessment of the individual's leadership and independent thinking skills. Based co-managers' answers for items 4, 5, 6, 7, 10 on the peer evaluation exercise.
Collaboration & Teamwork	Assessment of the individual's collaborative skills, teamwork, and ability to work well with others. Based on co-managers' answers for items 1, 3, 8, 9, 11 on the peer evaluation exercise.
Financial Analysis	Assessment of the individual's skills in analyzing financial ratios and financial statements. Based on the individual's answers to selected questions from Quiz #2.
Financial Management	Assessment of the group's ability to apply financial management principles. Based on the company's ROE, credit rating, and stock price performances.
Operations Management	Assessment of the group's ability to manage production operations and control production costs. Based on the company's production cost competitiveness as measured by production costs per unit (adjusted for product quality and product line breadth), capacity utilization, and management of finished goods inventories.
Marketing Management	Assessment of the group's ability to effectively market the company's product and control marketing costs. Based on the company's market image and marketing costs per unit sold.
Human Resources Management	Assessment of the group's proficiency in workforce management and controlling labor costs. Based on work-force compensation, workforce productivity, and labor costs per unit sold.
Strategic Analysis & Planning	Assessment of the group's strategic planning and strategic thinking skills. Based on scores achieved on the 3-Year Strategic Plan exercise.
Corporate Social Responsibility	Assessment of group's awareness of and commitment to operating the company in a socially responsible manner and being a "model corporate citizen". Based on the % of company revenues spent on the six corporate social responsibility initiatives.

(Business Strategy Game, n.d.)

Appendix B

Sample Balanced Scorecard

Balanced Scorecard

Industry Scoring   Balanced Scorecard   My Teams

My Teams

Here are the possible and earned points that are scored on the decisions your team makes during a round. Clicking each score will display a breakdown of how it was calculated.

Team Name	Rd 1	Rd 2	Rd 3	Rd 4	Rd 5	Rd 6	Rd 7	Rd 8	Recap	Total
Andrews	39	0	0	0	0	0	0	0	42	81
Baldwin	68	0	0	0	0	0	0	0	102	170
Chester	61	0	0	0	0	0	0	0	95	157
Digby	65	0	0	0	0	0	0	0	98	163
Erie	60	0	0	0	0	0	0	0	95	155
Ferris	68	0	0	0	0	0	0	0	96	164
Possible Points	82	89	89	100	100	100	100	100	240	1000

Balanced Scorecard Details

For more information on the scoring criteria, click that criteria below.

Team: Andrews
Round 1 Score / Points.

Financial			Internal Business Process		Customer		Learning and Growth	
Stock Price	7.5	/8	Contribution Margin	0.5 /5	Customer Buying Criteria	1.5 /5	Employee Turnover Rate	3.4 /7
Profits	1.0	/9	Plant Utilization	0.0 /5	Customer Awareness	0.0 /5	SubTotal	3.4 /7
Leverage	8.0	/8	Days of Working Capital	3.3 /5	Customer Accessibility	0.0 /5		
SubTotal	16.5	/25	Stock-out Costs	5.0 /5	Product Count	2.9 /5		
			Inventory Carrying Costs	0.5 /5	SG&A Expense	5.0 /5		
			SubTotal	9.3 /25	SubTotal	9.4 /25		

Preliminary standings: Round 1 points: 38.6 of 82
Round 1: **11 percentile***
Overall at the end of Round 1: **11 percentile***
Daily standings are calculated at 3:00am ET.
*(Preliminary does not include today's results from other teams.)

(Capsim, n.d.)

Appendix C

Sample Roster Report

	A	B	C	D	E
1	Name	Email	Sim ID	Team	Registration Number
2	Allen, Veronica	vallen@college.edu	C87297	Baldwin	SIM-C87297Baldwin7
3	Brown, Ariel	abrown5@college.edu	C87297	Andrews	SIM-C87297Andrews4
4	Davis, Antonio	adavis7@college.edu	C87297	Digby	SIM-C87297Digby14
5	Jones, Teresa	tjones@college.edu	C87297	Andrews	SIM-C87297Andrews3
6	Martin, Carissa	cmartin@college.edu	C87297	Chester	SIM-C87297Chester10
7	Michaels, Jessica N	jmichaels@college.edu	C87297	Digby	SIM-C87297Digby15
8	Peters, Luis	lpeters@college.edu	C87297	Baldwin	SIM-C87297Baldwin8
9	Post, Cheryl Rose	cpost@college.edu	C87297	Chester	SIM-C87297Chester12
10	Russell, Jean Pierre	jrussell@college.edu	C87297	Baldwin	SIM-C87297Baldwin9
11	Smith, Courtney	csmith@college.edu	C87297	Andrews	SIM-C87297Andrews2
12	Ward, Kevin Nicolas	kward@college.edu	C87297	Digby	SIM-C87297Digby16
13	Waters, Sandra	swaters@college.edu	C87297	Andrews	SIM-C87297Andrews5
14	Williams, Kiana	kwilliams@college.edu	C87297	Baldwin	SIM-C87297Baldwin6
15	Woods, Robert L.	rwoods3@college.edu	C87297	Chester	SIM-C87297Chester11
16					

Appendix D

Instructor Survey

Informed Consent

Dear Faculty Member,

I am a doctoral student at New Jersey City University, and am conducting research under the supervision of Dr. Christopher Carnahan on the various factors affecting the relationship between student performance on the Capsim Capstone simulation and the Comp-XM comprehensive examination. Because you have been identified as currently teaching a course which uses these simulations, your participation is important.

To participate, please complete the survey at the link below, which should take less than 5 minutes. In addition, you are requested to supply three reports, available on your Capsim dashboard. The total time commitment to participate in this study should be less than 20 minutes.

There are no known risks to participating in this study. The data collected during this study will be held securely for five years. There is no direct benefit to you from participating in this study. Upon completion of the report, a copy of the findings will be sent to you on request. Your participation is voluntary, and greatly appreciated.

If you are interested in participating in this study, please answer the survey questions at the link attached. Instructions for creating the requested files are also attached. If you have any questions, please contact me, Veronica O'Neill, at voneill@njcu.edu.

This study has been reviewed and approved by the NJCU Institutional Review Board.

Thank you in advance for your participation in this project.

Survey

1. I have read the attached informed consent, and agree to participate in this study.

    o   Yes

    o   No

Please fill out these questions for each course you currently teach which includes the

Capsim Capstone simulation and the Comp-XM comprehensive examination.

2. Course 1

    i.   Capsim Industry ID for course _____

    ii. Format chosen for Capstone simulation

        o   Tournament

        o   Footrace

    iii. Number of practice rounds completed _____

    iv. Number of competition rounds completed _____

3. Course 2

    i.   Capsim Industry ID for course _____

    ii. Format chosen for Capstone simulation

        o   Tournament

        o   Footrace

    iii. Number of practice rounds completed _____

    iv. Number of competition rounds completed _____

4. Course 3

    i. Capsim Industry ID for course _____

    ii. Format chosen for Capstone simulation

      o Tournament

      o Footrace

    iii. Number of practice rounds completed _____

    iv. Number of competition rounds completed _____

5. Course 4

    i. Capsim Industry ID for course _____

    ii. Format chosen for Capstone simulation

      o Tournament

      o Footrace

    iii. Number of practice rounds completed _____

    iv. Number of competition rounds completed _____

Please submit the reports described on the next page.

Thank you for your participation in this study.

For each of the courses identified above, please generate the following reports, and forward them to voneill@njcu.edu:

1. Final Balanced Scorecard

    On Capsim Instructor Dashboard, select the course section

    Select Industry Scoring

    Select Balanced Scorecard

2. Student Roster

    On Capsim Instructor Dashboard, select the course section

    Select Industy Results

    Select Reports

    Select Student Database

       Check Name, E-mail, Team and Registration Number

    Click Build

    Export to CSV, which will create an Excel file

3. Comp-XM Assurance of Learning report

    From Capsim Instructor Dashboard, select the course section

    Select Comp-XM reports

    Select Assurance of Learning

Appendix E

Participant Survey

Informed Consent

Dear Business Student,

I am a doctoral student at New Jersey City University, and am conducting research under the supervision of Dr. Christopher Carnahan on the various factors affecting the relationship between student performance on the Capsim Capstone simulation and the Comp-XM comprehensive examination. Because you have been identified as currently enrolled in a course which uses these simulations, your participation is important.

To participate, please complete the survey at the link below, which should take less than 5 minutes. Your answers and your identity will not be revealed to any other party. There are no known risks to participating in this study. The data collected during this study will be held securely for five years. There is no direct benefit to you from participating in this study. Upon completion of the report, a copy of the findings will be sent to you on request. Your participation is voluntary, and greatly appreciated.

If you are interested in participating in this study, please answer the survey questions at the link attached. If you have any questions, please contact me, Veronica O'Neill, at voneill@njcu.edu.

This study has been reviewed and approved by the NJCU Institutional Review Board.

Thank you in advance for your participation in this project.

Survey

1. I have read the attached informed consent, and agree to participate in this study.

    o Yes

    o No

2. I have read the attached informed consent, and agree to participate in this study.

    o Yes

    o No

3. I am currently enrolled in a course which is using Capsim Capstone and Comp-XM.

    o Yes

    o No

4. My Capstone Registration number is: _____

5. Prior to the current semester, I participated in a Capsim simulation

    o Yes

    o No

   If yes, please provide the name of the course in which you used a Capsim simulation

   _____

6. Your gender:

    o Male

    o Female

7. Your age at your last birthday: _____

   Thank you very much for your participation!