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The Journal for Advancing Business Education is a practitioner and scholarly journal that publishes the best work in the field of business education to enhance teaching, achieve student learning outcomes, and meet program goals. The Journal follows the general IACBE theme of "Moving. Forward. Together." All submissions are subject to a double-blind peer review process. The Journal is an online journal and accessible on the IACBE Web page. The Journal for Advancing Business Education is a biannual publication.

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FROM THE EDITOR

Dear Reader,

We are delighted to present the second issue of the Journal for Advancing Business Education, Volume 1, Issue 2. With every issue of the Journal we want to showcase quality work from practitioners and scholars in the business education field and related disciplines from the United States and around the world. By projecting their voices, we hope to create a platform for discussion between practitioners and scholars within the IACBE membership and beyond. We anticipate that this conversation among educators will lead to improved educational pathways for teachers and students.

In the coming year, we expect to gain more domestic and international visibility for the Journal for Advancing Business Education. In this respect, the editorial team wants to transform the Journal into more than just an outgrowth of the IACBE organization. In addition, the editorial team wishes to make some of the excellent scholarship that can be seen at the national and regional IACBE conferences more widely available through the Journal. At the same time, the team knows that it has to set the Journal apart from similar publications by encouraging the submission of more experiential pieces. Simultaneously, the editors want to combine the areas of business and education (and pedagogy) in a fruitful manner by expanding this discussion through the multifaceted ways in which business and education interrelate. The editorial team also aims to increase the publication portfolio of this Journal with a new variety of contributions, such as special issues, cases, book reviews, and, farther down the road, essays and short commentaries. In doing so, the team plans to make the Journal and the work of the IACBE membership more visible by MOVING the Journal and business education FORWARD so that we can make, TOGETHER, a noticeable difference in higher education.

On behalf of the editorial team of the Journal for Advancing Business Education, we would like to thank the authors who submitted their work for review. We would also like to thank the reviewers who so generously donated their time, expertise, and knowledge to review the Journal manuscripts.

We hope you will find the contributions in this issue of the Journal for Advancing Business Education interesting.

Thank you!

Christian Gilde
Managing Editor

Journal for Advancing Business Education

VOLUME 1, ISSUE 2

THE STRONGEST LINK: A CLASSROOM-BASED RESEARCH ON ENHANCING STUDENT PERFORMANCE AND MOTIVATION THROUGH COLLABORATIVE TESTING

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ABSTRACT

This research study employs a two-stage quiz to examine how collaborative testing affects students' quiz performance. Results of this study show that collaborative testing significantly increases students' quiz scores. Moreover, there is a "strongest link" effect: the group quiz score is determined by the group member who has the highest individual quiz score, whereas a low-performing member does not negatively impact the group performance. Female students are more likely to contribute to the group compared to their male counterparts. Overall, students speak positively of the collaborative testing that it motivates them to learn with and from their peers.

INTRODUCTION

Collaborative testing is a widely used method of collaborative learning in higher education. Incorporating the instructional strategies of peer-learning and think-pair-share, this approach allows students to complete quizzes or exams as a group in a collaborative learning environment. Students discuss the answers with their group members and submit either one group result or individual results, depending on how the instructor would like to hold individual students and the group accountable for their work. While participating in group discussions and discovering the correct answer together, students are able to correct their inaccurate responses in the individual quiz as well as share the knowledge and their learning experience as a team, which helps directly improve their task performance (Epstein et al., 2002). Research results show that collaborative testing improves student grade (Gilley & Clarkston, 2014; Mahmood & Ahmad, 2010) and enhances the retention of the course content (Cortright, Collins, Rodenbaugh, & DiCarlo, 2003). Kapitanoff (2009) claimed that the rationale behind the relationship between collaborative testing and better student performance is that collaborative testing promotes individual cognitive processes and reduces test-related anxiety. The study of Dibattista and Gosse (2006) also confirmed that collaborative testing indirectly improves student task performance via reduced level of anxiety. Besides, previous research studies find that collaborative testing such as group quizzes and group exams positively affect student attitude, motivation, and behavior towards learning (Clinton & Kohlmeyer, 2005; Hoffman, 2009; Reinig, Horowitz, & Whittenburg, 2014; Slusser & Erickson, 2006; Vasan, DeFouw, & Compton, 2009).

Although there are many studies investigating the effect of collaborative testing on student learning outcomes in various disciplines at the college level, little work has been done to examine how team-based learning and testing influence student performance in economics classes in higher education. This research study fills the gap in the literature by providing both quantitative and qualitative evidence on how collaborative quiz affects student performance using first-hand data collected from a class experiment in introductory-level economics classes. Participants of this study are freshman students from principles of microeconomics and macroeconomics classes at a regional public university in the United States. They are traditional students of Generation Z, who were born between the mid-1990s and early-2000s. This study uses a two-stage quiz where students complete a quiz first independently and then do the same quiz again immediately afterward in groups of three or four. Results of this study show that collaborative testing significantly improves student performance on the quiz. The average group quiz score is 68.6% higher compared to the average individual quiz score. Furthermore, OLS regression results show that the group quiz score is not affected by the person with the lowest individual quiz score of the group but is more determined by the individual who has the highest individual quiz score of the group. In other words, there is a strongest link effect in collaborative testing. In addition, the group is more likely to benefit from having female students as group members. Students provided feedback on the two-stage quiz by answering a questionnaire about collaborative testing upon completion of the quiz. Most participants claim that taking the quiz in a group encourages them to ask questions and learn from and with their peers.

This study contributes to the existing literature in four ways. First, it offers empirical evidence on how collaborative testing promotes student test results in the discipline of economics. Economics is sometimes considered as the most "scientific" subject among all the social science disciplines, and studying economics requires both qualitative and quantitative thinking. Since it is found that the two-stage quiz improves student test performance in economics classes, the same

outcome should generally apply to other disciplines in science and arts and humanities as well. Second, in contrast to previous studies where subjects either complete an individual quiz or a group quiz, this study uses the two-stage quiz where subjects take both the individual and the group quiz. This design allows a within-subject comparison of the value added by collaborative testing. Besides, the two-stage quiz complements the traditional individual quiz and encourages students to think independently and work collaboratively, as well as allows instructors to use multiple ways to assess student performance. Third, participants of this study are freshman students of Generation Z. They represent the current prevailing student body. Compare to subjects in previous studies who are from Generation Y or earlier generations, individuals of Generation Z are known to be more independent, competitive, and they put more value on individualism and self-esteem. Hence, this study extends the existing literature by providing time-sensitive evidence on how collaborative learning is still effective among the current student body. Last but not least, this study provides quantitative analysis on what factors contribute to improved test outcome of the group quiz as well as qualitative evidence on how the two-stage quiz facilitates student learning and benefits them beyond their academic achievement. Students not only develop their independent-thinking ability but also improve their communication skills, leadership ability, and teamwork ethics during this practice. Multiple students mentioned in their feedback survey that the two-stage quiz approach motivates them to learn from and with their peers.

The rest of this article proceeds as follows. The next section reviews the related literature. Section 3 offers the research hypothesis. Section 4 describes the study design and summary statistics. Section 5 presents the empirical model and the regression results. Section 6 discusses the implications of this study and concludes.

LITERATURE REVIEW

As an important component of the broader pedagogy practice of collaborative learning, collaborative testing helps students construct and organize their thoughts before and during their interactions with others. For instance, students need to read and understand the questions before discussing a problem with their peers, not to mention that they have to think through and form some understanding to contribute to the group knowledge. During the discussion, students need to process and reflect the information received from their group members. Previous research finds that collaborative testing improves student learning outcomes and retention of the course content. For example, Rao, Collins, and DiCarlo (2002) conducted a quasi-experiment with psychology students and found that those who completed quizzes in teams did better than those who worked as individuals. Cortright, Collins, Rodenbaugh, and DiCarlo (2003) conducted a class experiment with undergraduate students from an exercise physiology class using a randomized crossover design to test the effect of group exam on student retention of course content. After taking the exam in the traditional format, students in the treatment group immediately answered a subset of questions of the exam in groups of two or three, whereas students in the control group did not receive this group-exam treatment. Students were tested the same knowledge four weeks later. After controlling for the time and order effect, the authors found that collaborative testing significantly improves student retention of course content. Gilley and Clarkston (2014) discovered similar results with undergraduate students from a science course. In their experiment, the authors adopted the crossover design and further controlled for the frequent-testing effect. Students in both the control and treatment group took the same test twice in the sequence of independent exam-

independent exam and independent exam-group exam in the control group and the treatment group, respectively. Results of this study show that collaborative testing promotes student learning among all levels of student groups including the high, middle, and low-performing students. Rieger and Heiner (2014) conducted their research to study the impact of two-stage quiz on student learning using post-test student surveys. Although there were 30 negative comments, students provided 236 positive comments on the two-stage quiz assessment technique, with most of them related to how this exam format benefits learning.

Kapitanoff (2009) examined the mechanism behind collaborative testing and found that group exam improves student performance via a direct channel and an indirect channel. Students perform better in the group test compared to their individual test as a result of enhanced memory, improved cognitive and thinking ability, and less test-related anxiety. Besides promoting student test performance, a number of researches also discovered that collaborative testing positively affects student attitude, motivation, and behavior towards learning, which contribute to student's academic excellence and success in future career in the long term (Hoffman, 2009; Reinig, Horowitz & Whittenburg, 2014; Slusser & Erickson, 2006; Vasan, DeFouw & Compton, 2009). For example, Slusser and Erickson (2006) conducted an experiment with an introductory-level sociology class and found that students who did group quizzes learn more and outperform those who did not. Moreover, they found that collaborative quiz positively affects student attitude and behavior towards learning. Moreover, such impact is not determined by the group composition. Clinton and Kohlmeyer (2005) employed an experiment to compare the influence of group quiz and individual quiz on student performance in an accounting class. They discovered that regardless of the group composition, i.e., regardless the group was ad hoc or long-term, randomly assigned or self-selected, students report significantly greater motivation to learn when working together.

There are few studies examining the influence of collaborative testing on teaching and learning economics. For example, Johnson, Johnson, and Stanne (2000) ran an experiment using 612 sophomore students from macroeconomics classes to test the effect of team-based and problem-based learning on student performance. The authors concluded that the approach of collaborative problem-solving increases student preparation for tutorial sessions and particularly promotes the learning outcomes of international students from Asia. Yamarik (2007) conducted an experiment using two sections of an intermediate macroeconomics class. One section adopted group problem-solving exercises while the other section used a traditional lecture format as the instructional method. The author found that those students in the cooperative learning environment achieved higher exam scores compared to their counterparts in the baseline group without group work.

Collaborative testing involves active learning and utilizes team-based learning. Singer and Smith (2013) found that interactive engagement and collaborative learning facilitate students achieving better learning outcomes in science classes. Koles, Stolfi, Borges, Nelson, and Parmelee (2010) found that team-based learning promotes medical student's performance in examination especially among those in the lowest performance-quintile. They concluded that the team-based learning approach enhances student mastery of their course content. Imazeki (2015) claimed that team-based learning encourages students to solve more complex problems and cultivates their higher-order cognitive skills in Bloom's Taxonomy, such as application, analysis, and evaluation.

Michaelsen and Sweet (2011) stated that when properly implemented, team-based learning can cover several of the best practices in evidence-based teaching, including cooperative learning, interactive teaching, reciprocal teaching, and assessment and feedback. Collaborative testing benefits student learning partially because it grants immediate feedback from their peers. Research

shows that students prefer the immediate feedback technique (Epstein et al., 2002) compared with the traditional approach of instructor-provided feedback where students hear back from their instructors days after completing their assignment or test. Besides, collaborative testing also actively engages students during their learning process. The two-stage quiz approach allows students to think simultaneous and acquire the same learning experience during the individual-quiz stage, and in the following group-quiz stage, students work collaboratively to share their knowledge and learning experience via quality discussions. Previous research shows that such pedagogy practice promotes student learning outcomes and learning experiences (for example, Bamiro, 2015; Bataineh, 2015; Lyman, 1981; Mazur & Hilborn, 1997; Mutiara & Bugis, 2018; Sampsel, 2013). Laal and Ghodsi (2012) concluded in their review article that learners benefits from collaborative learning and testing in multiple ways in the social, psychological, academic, and assessment perspectives. They claimed that during collaboration, there is "a sharing of authority and acceptance of responsibility among group members for the groups' actions" (p. 486). More pedagogical and classroom-based research also find that peer-instruction has a positive impact on students' learning process (Crouch & Mazur, 2001), achievement and attitudes (Boud, Cohen, & Sampson, 1999; Boud, Cohen, & Sampson, 2014), critical thinking ability, collaborative and communicative skills, and it enhances students' learning autonomy and motivation (Stigmar, 2016). Regarding assessment, collaborative testing allows instructors to employ a variety of assessment instruments to measure student learning outcomes instead of relying on one single assessment tool such as exam grade (Laal & Ghodsi, 2012; Panitz & Panitz, 1999). Instructions have the flexibility to employ various assessment tools to evaluate student learning, including group performance, individual performance, participation, peer feedback, self-assessment, and so on (Boud, Cohen, & Sampson, 1999).

RESEARCH HYPOTHESIS

This research study examines the impact of collaborative testing on student quiz performance in introductory-level economics classes. The following hypotheses are tested using a classroom-based experiment and data.

H1: The two-stage quiz collaborative testing method is expected to positively affect student quiz performance. (This positive impact shall be reflected by a higher score achieved in the group quiz compared to that of the individual quiz.)

H2: Student group quiz score may not be equally influenced by every group member. (In other words, high-performing individuals may have a larger influence on the group quiz score compared to low-performing individuals, or vice versa.)

This hypothesis will be tested by examining the variable coefficients in the Ordinary Least Square (OLS) regression model.

DATA AND SUMMARY STATISTICS

The data used in this study is collected from two consecutive semesters during the 2016-2017 academic year at a regional public university in the Midwest of the United States. A two-stage quiz was executed during regular class times in one principles of microeconomics class and one principles of macroeconomics class. Students first took the quiz independently as part of their normal class routine without knowing there was a second stage to follow. This gives the students the incentive to do their best on the individual quiz because their in-class quiz scores are counted towards their final grade per the course syllabus. Upon submitting the individual quiz, students were randomly paired into groups of three or four to do the same quiz again. At the beginning of this second group-quiz stage, students were told that both of their individual quiz and group quiz would be graded, and their final quiz score would be the average of the two. Hence, students have the incentive to do well on the group quiz as well. The individual quiz and the group quiz took ten minutes each. Students were not allowed to talk during the individual quiz but were encouraged to discuss the questions with their group members during the group quiz. This quiz contains ten multiple choice questions which cover the course content from the previous week. To answer these questions, students need to exercise their higher-order thinking skills to understand, apply, and analyze the materials learned. Two sample quiz questions are provided below.

Sample quiz question #1 (microeconomics): Which of the following is not a difference between monopolistic competitive market and perfect competitive market?

> A. Firms in a monopolistic competitive market can earn positive economic profit in the short run while firms in a perfectly competitive market break even.
> B. Firms in a monopolistic competitive market charge a price higher than marginal cost while perfectly competitive firms charge a price equal to marginal cost.
> C. Firms in a monopolistic competitive market choose to produce the quantity at which marginal revenue equals marginal cost while perfectly competitive firms do not.
> D. Firms in a monopolistic competitive market face downward sloping demand curves while perfectly competitive firms face horizontal demand curves.
> E. Firms in a monopolistic competitive market sell differentiated products while firms in a perfectly competitive market sell identical products.

Sample quiz question #2 (macroeconomics): Based on Figure 1, which of the following would cause the long-run equilibrium point to change from point B to point D?

Figure 1: Sample quiz question #2 figure
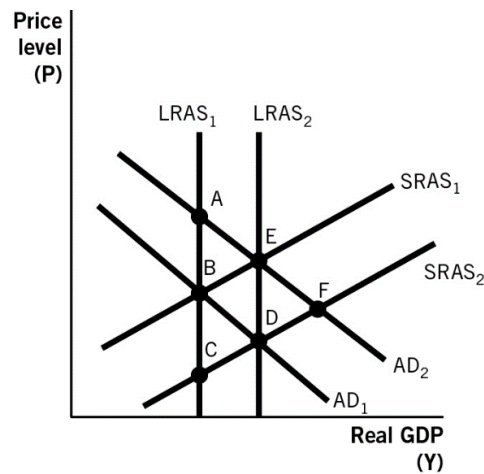
- A. The population has aged and there are fewer people in the labor force.
- B. Firms and workers expected the price level to rise.
- C. The economy experienced an increase in government spending.
- D. The economy was in an expansion and has adjusted.
- E. The country's overall productivity increased.

A total of 57 students took the quiz. These students are first-year business majors who belong to a cohort program. They are traditional students of Generation Z. Table 1 presents the summary statistics. The total points a student can earn from the quiz is 10 points, with one point for each question. The students' actual quiz scores range from 1 to 10 for the individual quiz and 7 to 10 for the group quiz. The mean values of the individual quiz score and the group quiz score are 5.19 and 8.75, respectively. These data are complemented with students' average exam scores, which factor is used as an indicator of their overall performance in the course. Students' average exam scores range from 22.5 to 99.5 out of 100 total points with an average score of 73.91. To capture some of the student personal characteristics, the gender variable is obtained from the class roster. *Female* is a binary variable equal to 1 for female students and 0 for male students. About 37% of the students are female, and 63% of them are male. Because the majority of the students are white and there is little variation in student age, ethnic background and age are not captured in this study.

Table 1: Summary statistics

Variable	Mean	Std. Dev.	Min	Max
Individual quiz score	5.19	2.17	1	10
Group quiz score	8.75	1.06	7	10
Average exam score	73.91	14.59	22.5	99.5
Female	0.37	0.49	0	1

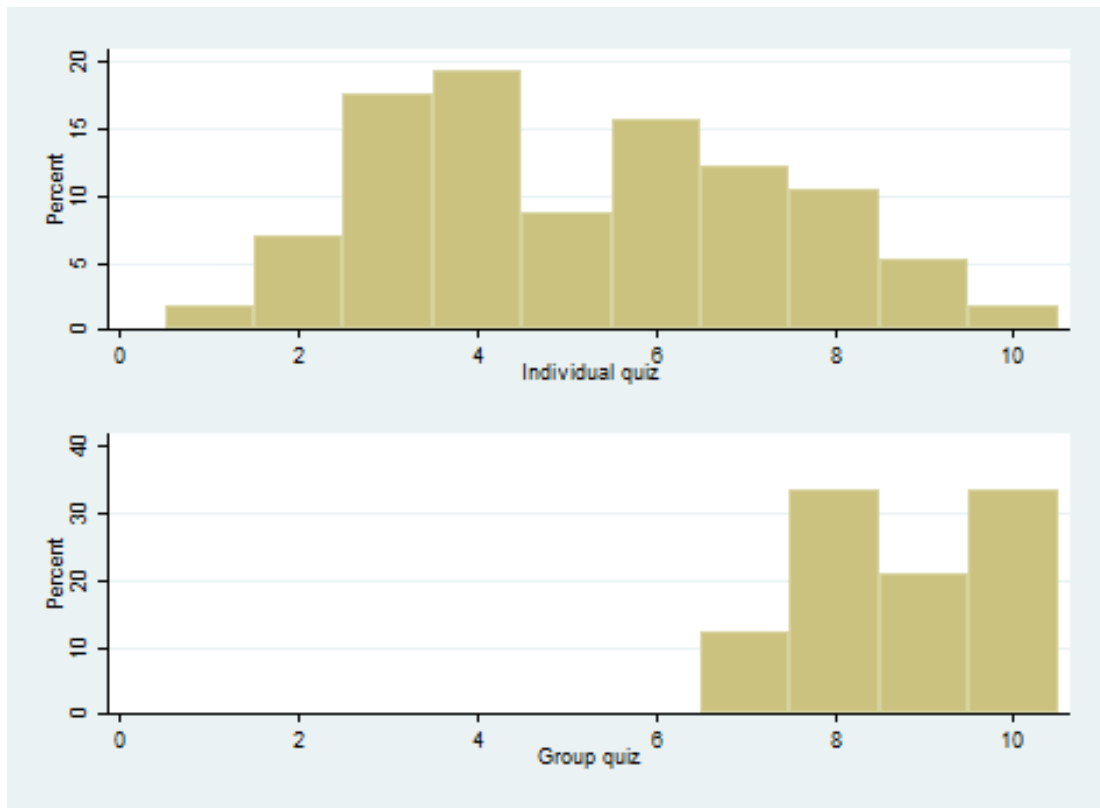**Figure 2: Grade distributions of individual quiz and group quiz**

Figure 2 shows the grade distributions of the individual quiz score and the group quiz score. The individual quiz score is more evenly distributed along the scale from 0 to 10 compared to the group quiz score, which is skewed to the left. This implies that in general, students perform better when taking the quiz as a group. A t-test is conducted to compare the means of the individual quiz and the group quiz. The test result confirms that the difference between the mean values of the group quiz score and the individual quiz score (8.75-5.19=3.56) is statistically significant at the 1% level (p-value=0.000). In other words, taking the quiz in the group format increases the average quiz score by 68.6% (3.56/5.19=68.6%). The data shows that there is no statistical difference in the mean values of the individual quiz scores between male students and female students (p-value = 0.7524 for Kruskal–Wallis test, assuming both test samples follow the same distribution, and p-value = 0.7645 for Mann–Whitney U test, assuming the test samples follow different distributions).

EMPIRICAL MODEL AND REGRESSION RESULTS

To further analyze the results, the following Tobit regression model is built to examine what factors impact the group quiz score:

$$ln\,(Group\ Score_j) = \beta_0 + \beta_1 \ln(Individual\ Score_{ij}) + \beta_2 \ln(Exam_{ij}) +$$
$$\beta_3 \ln(Group\ Min_j) + \beta_4 \ln(Group\ Max_j) + \beta_5\ Female_j + \varepsilon_{ij} \qquad\qquad (1)$$

In Model (1), i is the individual indicator and j is the group indicator. ε_{ij} is the error term. The dependent variable *Group Score$_j$* is the group quiz score received by group j. This variable is left censored at zero and right censored at ten since the possible scores are bounded within this range. The independent variable *Individual Score$_{ij}$* is the score received by individual i of group j in the individual quiz. *Exam$_{ij}$* is the average exam score received by individual i of group j, which is an indicator of student i's overall performance in the class. *Group Min$_j$* is the lowest individual quiz score received by a member of group j, and *Group Max$_j$* is the highest individual quiz score received by a member of group j. These two variables capture the teammate effect of having a relatively low performing student and a relatively high performing student in a group. All the dependent variable and the independent variables are in the form of natural log for interpretation purpose. *Female* is a binary variable equal to 1 if there is at least one female student in group j and 0 otherwise. Since the majority of the students are white, this model does not include student ethnic background. The model also excludes student age and school year because all the subjects are freshmen from a cohort program, and there is little variation in their age.

Table 2 presents the regression results of Model (1). It is shown that the coefficient and p-value of the variable *Individual Score* are .0026181 and 0.945, respectively. For the variable *Average Exam*, these numbers are .0305734 and 0.630, respectively. These findings indicate that the group quiz score is not determined by an individual's performance on the quiz or one's overall performance in the class. For the variable *Group Min*, the coefficient is -.0434774 and the p-value is 0.267. These numbers imply that although having a low-performing student in the group negatively impacts the group quiz score, this effect is statistically insignificant. On the other hand, for the variable *Group Max*, the coefficient is .195107 and the p-value is 0.004. These numbers imply that the individual who received the highest individual quiz score in the group is positively affecting the group quiz score, and this effect is statistically significant. Moreover, these numbers can be interpreted as if the highest individual quiz score of the group increases by 1%, the group quiz score will increase by approximately 19.5%, holding everything else equal. This result is significant at the 1% level. In sum, the group quiz score is not bounded by the "weakest link" but is determined by the "strongest link" of the group. Considering the fact that the student groups are randomly formed, and students only have limited time to answer the questions, the peer-teaching and peer-learning are quite effective. Besides, the regression results also show that female students contribute positively to their group quiz score (coefficient=.0769771; p-value=0.020). Compared to groups with male students only, having a female student(s) in the group increases the group quiz score by 7.7%, and this result is significant at the 5% level.

Since there is zero difference in student school year and little difference in student age and ethnic background, these variables are not included in Model (1). A separate model with student age and race has been tested, and the results show that there is no significant difference in the signs and magnitudes of the existing coefficients compare to Model (1). These results are not presented in this article but will be available upon request. The value of pseudo R^2 (-0.1980) in Model (1) implies that the group quiz score is partially explained by those independent variables included. Due to data availability, student personal characteristics such as overall academic standing, employment status, family socioeconomic background, and so on are not included in the regression model. Further research with a more diverse student body and greater data availability will be necessary to investigate how other factors such as student age, school year, race, overall GPA,

whether the student is an international student or non-native speaker of English, etc., would affect student performance in the two-stage quiz.

Table 2: Regression results

Variable	Coefficient	Standard Error	P-value
Individual Score	.0026181	.0377043	0.945
Average Exam	.0305734	.0630136	0.630
Group Min	-.0434774	.0387562	0.267
Group Max	.195107***	.0651827	0.004
Female	.0769771**	.0320573	0.020
Constant	1.66146***	.2978389	0.000
Sigma	.1064096	.0099659	
Number of Obs	57		
Pseudo R^2	-0.1980		

Note: ***Significant at 1% level. **Significant at 5% level.

CONCLUDING REMARKS

Collaborative testing is an efficient practice of active-learning following the think-pair-share and the peer-instruction pedagogy approach. This study uses an in-class individual quiz and group quiz to examine the effect of collaborative problem-solving on student short-term learning outcomes. The two-stage quiz refrains the problem of free-riding in group works because students are required to think independently before working as a group. Since both of their individual and group work count towards their grade, students are encouraged to do their best on both quizzes. Two research hypotheses are tested by the classroom-based experiment and data. Results of this study show that (1) collaborative testing positively impacts student quiz performance. On average, collaborative testing increases student quiz score by 68.6%, and (2) student group quiz score is strongly influenced by the high-performing group member while the low- performing individual has little impact on the group quiz score. There is no weakest link effect but the strongest link effect when completing the quiz as a group. Results of this study also show that students perform better when working together in a group, despite the stereotypes attached to individuals from Generation Z such as they prefer to work alone and think independently. This finding is also supported by the evidence from student post-quiz surveys, as they mention that "working with peers always helps," and they "like learning from peers." Furthermore, although there is no statistical difference in the average individual quiz scores between female and male students, having a female student in the group increases the group quiz score. This implies that female students are more likely to contribute to the group and/or facilitate group discussion compared to male students.

The scope of this research study is focused on how a collaborative quiz affects student learning in principles of economics classes. Due to the limited time period and the number of observations of this research, we can only draw conclusions that the two-stage collaborative quiz enhances students' academic performance in the short term. It will be interesting and worthwhile to conduct further research to better understand the full impact of collaborative testing on student performance both in the classroom and in real-life in the short run and the long run. In addition, a

cross-university study on a diverse student body may be helpful not only to increase the number of observations to allow for further statistical analysis but also to examine how various personal characteristics interact with collaborative testing and if there is any heterogeneity in the impact of collaborative testing on student learning.

Although this research study is conducted with students from introductory-level economic classes, results of this study offer general insights to educators from a wide range of disciplines. It is fairly easy to implement collaborative testing in the classroom as a complement to traditional assessment strategies with low additional time-cost. During student group discussion, the instructor can either be an observer, a facilitator, or adopt a more active role to be part of a group, such as a group member or a tutor, for a short time period and move around groups. Instructors can also choose to share certain information and student learning experience within a group, across groups, or with the entire class during group discussion. For example, an instructor can answer a question in private when a group is not sure about their answer. If the instructor receives the same question from multiple groups, then it probably is a good time to pause the group discussion for a brief class instruction to provide students with a hint or further guidance for that question. This approach of collaborative testing allows instructors to tailor to a group or an individual's specific needs and accommodates personalized learning experience in a smaller learning environment. It also helps to build closer relationships between the instructor and the students and among students themselves through small, informal conversations, and it works well both in small and large classroom settings. The two-stage quiz assessment strategy also offers instructors multiple ways to evaluate student performance. Depending on how the instructor would like to assess student performance, the final quiz or test grade can be a combination of student individual quiz/test score, group quiz/test score, participation in group discussion, self-evaluation, peer-evaluation, and so forth. Instructors can also put different weight on these assessment tools to construct grading rubrics.

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EMOTIONAL HUMAN, TECHNOLOGY, AND KNOWLEDGE COMPETENCES ANDSATISFACTION: A STUDY OF A STRATEGIC MODEL

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ABSTRACT

This paper combines a new strategic management framework and model, with proven organizational competences and faculty satisfaction literature and measures. It is proposed that differences in levels of emotional human (E), technology (T), and knowledge (K) competences within post-secondary educational institution academic departments determine the satisfaction of those faculties who work in those departments. Data was obtained from educational institutions in five Latin American countries. Findings suggest that there is a direct relationship and positive correlation between said competences and faculty satisfaction, and that there exists faculty satisfaction rankings among the number of developed levels of E, T, and K competences.

INTRODUCTION

The proliferation of the World Wide Web and the increase of Internet connectivity have created new problems and opportunities for educational institutions around the world. Traditionally, institutions of higher learning are only a part of a larger national public education system within each country. These systems consist of multiple sites or institutions that provide support for one another and are strategically located to serve the majority of the population. These public educational systems have in the past enjoyed guaranteed funding from government and limited competition from private educational institutions.

Investments in technology since the mid-1990s, such as computers, broadband connectivity, and undersea cables, have consolidated the world's markets, propelling the world economy. According to Friedman (2005), around the year 2000, hardware and software technologies formed a platform where intellectual work and intellectual capital could be delivered from anywhere. Due to technologies such as e-mail, search engines, and word-processing applications, it is now feasible to produce, divide, and distribute work all over the world. Private businesses may now outsource knowledge work to other countries where the costs are less and the quality is the same or frequently better than within their own countries.

In spite of these benefits to business generally, the advent of new technologies such as the Internet is increasingly exposing public educational institutions to new competition that may prove detrimental to their long-term sustainability. Many universities and professional development institutions now have an online presence and offer courses and award degrees at a distance from where those they serve reside. With more individuals around the world learning how to navigate the World Wide Web and with the improvement of distance education practices and techniques, public educational institutions will have to improve their own performance and services to compete with these new virtual educational institutions.

Traditionally in Latin America, the majority of post-secondary educational institutions were public and served as the benchmark of higher education in most Latin American countries (Balan, 2000). After 1990, the increase in private post-secondary educational institutions, and the increase in matriculated students at these institutions (Balan, 2000), boosted competition within the educational sector.

Today in Latin America, private post-secondary educational institutions deliver the highest quality of education (De Wit, Jaramillo, Gacel-Avila, & Knight, 2005; Thorn & Soo, 2006). They often adopt and practice the latest organizational and educational technologies. In contrast, traditional public post-secondary educational institutions in Latin America are inefficient and self-serving because they are mainly influenced by politicians, bureaucrats and professors. Latin American governments must be aware of these potential challenges faced by their public educational institutions, and of the growth of private educational institutions.

All organizations must improve their internal and external operations as competition increases worldwide and, to a large extent, in developing countries. The ETK strategy and model theorize that organizations' implementation of strategies that properly address emotional, technological, and knowledge dimensions within their organizations will enable these organizations to achieve higher levels of performance (Cardenas & Finnigan, 2001; Cardenas, 2003). The E dimension of the ETK strategic approach encompasses key emotional human aspects, or competences, that are evident within organizations. These emotional human aspects include communication, group cohesion, leadership, empathy, and cultural sensitivity. The T dimension refers to the technological aspects, or competences, within organizations. Technological

competences include technology acquisition, acceptance, and training. The final dimension, K, involves knowledge aspects, or competences, many of which are considered knowledge management (KM) competences.

The paper starts with a brief review of the major components of the ETK model and faculty satisfaction. The hypotheses presented describe the potential effects ETK competences have on faculty satisfaction within academic departments of public post-secondary educational institutions in Latin America. Next, the sample and empirical method are described and then the results are presented. The article concludes that the study advances the ETK theory and our understanding of key organizational competences. Also, that the study may be utilized as a new and effective method of measuring faculty satisfaction as an indicator of organizational performance. As such, the final determination is made that the study and findings are highly valuable to the fields of educational institution quality, strategy, and general organizational strategy.

LITERATURE REVIEW

Faculty Satisfaction

Faculties are very important in educational institutions and they are one of the essential resources of educational institutions. Satisfied workers perform at their maximum capacity and for the good of the organization (Tack & Patitu, 1992). In contrast, dissatisfied workers often seek to increase their own satisfaction by implementing actions that benefit their own needs without the organizations' interests in mind. This is likely to occur in a post-secondary educational institution, where the environment is not highly structured or supervised; hence, faculties at these institutions have considerable discretion over how they spend their time. Resulting dissatisfaction may lead to faculty inefficiency, which ultimately decreases productivity and work quality.

Faculty satisfaction is important because educational institutions and their departments must not only provide instruction and teaching to their students, but they must also conduct a large amount of high-quality research. A study by Goodwin, Kozleski, Muth, Rhodes, and White (2006) confirmed that when an institution established a research support center for its faculty, the faculty's productivity and research quality improved. There was also high faculty satisfaction associated with the center. Post-secondary educational institutions improve the quality of their teaching and research by ensuring that their faculty is happy and pleased with their job.

Emotional Intelligence

Payne (1986) coined the term "Emotional Intelligence". In his doctoral dissertation, he asserted that many of society's problems are due to the repression of emotions. Salovey and Mayer (1990) were the second authors to conceptualize the term "Emotional Intelligence". They suggested that it may be a separate form of intelligence. The authors described it as an "ability to monitor one's own feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions".

Despite Salovey and Mayer's published article, academia and the popular press did not heed to the concept of emotional intelligence (Salovey, Bracket, & Mayer, 2004). It was not until Goleman (1995) published *Emotional Intelligence: Why It Matters More Than IQ*, did emotional intelligence gain popularity in academia and management circles. Goleman (1995) stated that IQ

only explains twenty percent of the variance in life success, leaving eighty percent unexplained. Goleman (1995) implied that emotional intelligence may be one of the factors that explains the unexplained variance of life success. This statement caught the public's attention and presented emotional intelligence as something of great value.

The discipline of emotional intelligence has promoted two main schools of thought—ability, and trait or mixed. Salovey and Mayer supported the ability school in which emotional intelligence is studied as a set of very specific skills, competences, or abilities completely separate from personality traits. In comparison, the trait or mixed school combined mental abilities with various other social competences, traits, personalities and behaviors, such as persistence, zeal, optimism and wellbeing, into one mode (Goleman, 1995; Mayer, Salovey, & Caruso, 2000). The ability school measured cognitive abilities related to emotions by using problem-solving exercises or performance tests, whereas the trait or mixed school measured personality traits related to emotions by using self-report questionnaires. Salovey and Mayer revised their definition of emotional intelligence, which they introduced in 1990. Within the original definition, they only mentioned perceiving and regulating emotion, excluding "the ability to think about one's own feelings". Their new definition, however, included the ability to reflect on one's own feelings. Both schools of thought involve logical assertions and credible research. The authors of both schools would agree that emotional intelligence consists of many skills, which, until 1995, were mostly lumped into one area of thought—leadership.

Leadership. Many authors, including Hersey, Blanchard, and Johnson (2001), have identified common characteristics of a leader. These authors suggest that effective leadership requires three general competences: diagnosing, adapting, and communicating. These three competences are directly related to the mental skills and social competences previously discussed, and identified by authors Goleman, Salovey and Mayer, as characteristics of emotional intelligence.

Many other researchers and authors on leadership refer to three common types of leaders—transformational, transactional, and charismatic (Gardner & Stough, 2001; Sosik & Megerian, 1999). Transformational leaders bring about positive and major changes in an organization (Dubrin, 2007). Transactional leadership is defined by a leader's application of influence through their setting of clear goals, clarifying of desired outcomes, providing of feedback and exchanging of rewards for accomplishments (Dvir, Eden, Avolio, & Shamir, 2002). The charismatic leader converts a follower's self-perceptions and achieves outcomes by; changing the follower's perceptions of the nature of work itself; offering an appealing future vision; developing a deep collective identity among followers; and, heightening both individual and collective self-efficacy (Conger & Kanungo, 1998). In addition to these three archetypes, many leadership authors and researchers have also identified "interactional leaders", who reflect a combination of the three styles (Legier, 2007).

Emotional intelligence is a predictor of effective leadership and, regardless of the leadership style, leadership is an essential part of an organization's performance. Goleman (1995) described effective leaders as those who exhibit an increased number of emotional intelligence traits, including motivation, empathy, self-awareness and integrity. Leaders that are emotionally intelligent are more effective at producing results than leaders that only focus on achievement of tasks. Based on the previous discussion the following hypothesis can be advanced.

Hypothesis 1: There is a direct relationship between emotive human (E) competences and departmental faculty satisfaction.

Technology Awareness

Technology has always been important to organizations. Its use, in terms of type and frequency, depends on the environment within and surrounding an organization. Environment includes factors such as internal and external economic conditions, characteristics of principal resources, management philosophies, and societal mores (McNurlin & Sprague, 2004). The environment constantly changes, and organizations must be prepared to adjust their business strategy and/or information technology (IT) management strategy in order to maintain their operations and market position. Ansoff (1965) defined this environmental change and coined the term for this phenomenon as environmental turbulence (ET).

Since the twentieth century, environmental changes have become more complex and novel and, at the same time, these changes have accelerated (Ansoff & McDonnell, 1990). Specifically, this acceleration is due to an increase in the frequency of change, or the number of new products, services and technologies available to and created by organizations, and the rate of diffusion of change, or the speed with which new products and services now invade markets (Ansoff & McDonnell, 1990). Organizations may purchase or acquire new technologies to compete in their respective markets when ET levels are high, but often their having the technology alone does not equate to sustainability of the organization. An organization must possess technology awareness, or competence, to achieve proper technology execution and implementation strategies so that it may survive environmental changes and remain competitive.

The ability to manage information, or "information literacy", is a highly valuable competency to organizations. Information literacy is the ability to recognize an information need, find appropriate information from a variety of sources, evaluate it and apply it constructively (Nassimbeni & Jager, 2000). This competency is essential for all workers, students and teachers because, in the new globalized information society, individuals must communicate with people from different geographic areas and areas of expertise, and operate new technologies.

A new information revolution has been well underway since 1999 (Drucker, 1999; Porter, 1998). This revolution has given birth to new industries in three distinct ways, according to Porter (1998). First, it makes new businesses technologically feasible. Educational institutions are finding new markets by utilizing the Internet and are competing with traditional brick-and-mortar educational institutions. The University of Phoenix is the most successful online university because of the variety of degrees it offers and its superior growth. Its initial public offering was in 1994. It offered both online and face-to-face courses. Although total enrollment grew 904% from 1995-2004, online enrollment grew an astonishing 5,017% (Hughes, 2006). Internet technologies have made it possible for such businesses to exist and thrive. Second, IT begets businesses by creating derived demand for new products. Third, it creates new businesses within old ones. For example, a company with superior information processing capabilities can provide this service to other organizations. Companies such as Hewlett Packard and AT&T have used server virtualization, which is a method of running multiple independent virtual operating systems on a single physical computer to sell a new service (Hamm, 2006). The previous discussion of technology invites to composition of the following hypothesis:

Hypothesis 2: There is a direct relationship between technology awareness (T) competences and departmental faculty satisfaction.

Knowledge Management

For hundreds of years, epistemology, or the theory of knowledge, has challenged the minds of many philosophers and authors, including Plato, Descartes, and Ghazzali. Epistemology is the study of knowledge; the main question it seeks to answer is, "What is knowledge?" Answers to this question differ, but we generally believe, as stated by Popper (1987), that "knowledge is not, somehow, genetically built into them [men], animals and men can only gain knowledge if they have a drive or instinct for exploration for finding out more about their world" (p. 116). Therefore, we understand that individuals must acquire knowledge from their surroundings and that they possess the inherent ability to do so. Only through this interaction between individuals and their surroundings may knowledge growth occur.

The emergence of a global economy and the information revolution have created a dynamic marketplace of accelerating change where organizations seek to improve their products and services through competitive advantage. Organizations' improving of products and services through organizational learning and their identification of core competences have been the latest trends through which organizations and industries create competitive advantage.

Knowledge management (KM) has been a growing discipline since 1995. Polanyi's (1958, 1967) work and Nonaka's (1991; Nonaka & Takeuchi, 1995) praised publications, in particular, form the basis of much KM literature. Polyani and Nonaka describe two types of knowledge, "explicit" and "tacit" (also described, respectively, as tangible and intangible). Both are important to organizations, but tacit knowledge has recently been viewed as a practical valued commodity and a possible source of competitive advantage, where it was not viewed as significant in the past.

KM practices can help organizations capture the tacit knowledge of their workers and convert it into explicit knowledge through a process Nonaka and Takeuchi (1995) call "externalization". The goal of externalization is to make the knowledge digestible to the knowledge seeker in the most efficient way possible.

According to Wiig (1993, 1994, 1995), through KM, organizations may achieve profitability, and organizational and individual growth. Per Drucker (1992), land, labor and capital have become secondary to knowledge as the primary resource for the new economy. Consequently, it is no surprise that organizations seeking to increase productivity and add value are accomplishing same through the acquisition of knowledge; therefore, the following hypothesis can be stated.

Hypothesis 3: There is a direct relationship between knowledge management (K) competences and departmental faculty satisfaction.

Conceptual Framework

ETK Framework. The ETK framework is an illustration of the ETK strategic approach developed by Cardenas (Cardenas & Finnigan, 2001). The ETK framework describes the E, T, and K dimensions and their relationships. According to the framework, when organizations possess these competences and practice them daily, they achieve optimal performance. Within the framework, when an organization possesses all three of the competences, the organization will experience synergistic effects. These relationships are illustrated in Figure 1.

Figure 1

ETK Framework
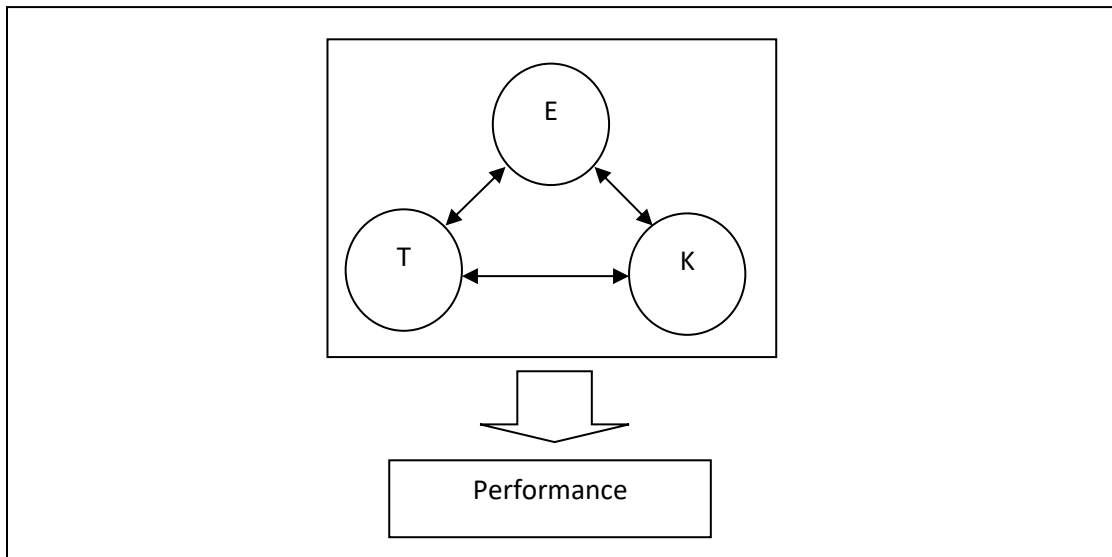
Research Model. The research model, shown in Figure 2, shows the ETK strategic approach within an academic department of a public post-secondary educational institution. A department is directly or indirectly affected by turbulence with regard to four major factors in the external environment. They are shown within a rectangle at the top of Figure 2.

Figure 2

Research Model with Hypotheses
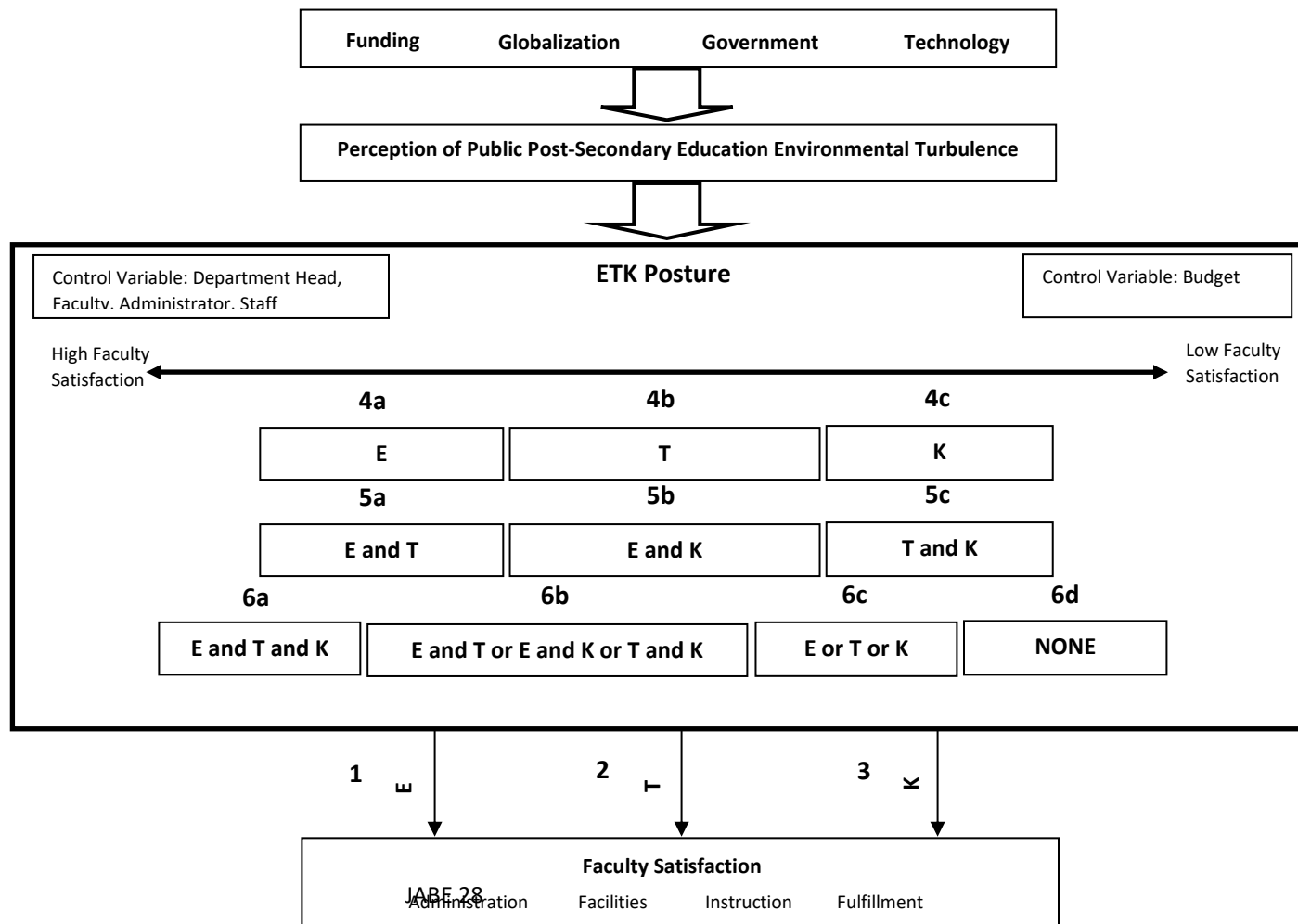
Funding is important for public post-secondary educational institution departments as it allows departments to maintain their daily operations and employ resources to improve educational services. Globalization affects departments by eliminating barriers and exposing departments to new markets. Government affects public departments because funding of public educational institutions is primarily provided by the government of the country within which the institution was founded. Government instability may be detrimental to an institution's sustainability, while government stability may fuel growth for public educational institutions. Technology is the final external factor that affects departments. Technologies improve the operations of educational institution departments and the manner in which departments provide their services. These departments must, therefore, adopt certain technologies to stay competitive. Some of these technologies are expensive and introduce major change into the departments.

The research model also shows that perceptions of department personnel differ as to the amount of turbulence, or change, the described factors produce. This perception may be consistent or inconsistent with the true effects of the external factors.

ETK posture refers to the extent to which a department has all three ETK dimensions or competences developed. These three dimensions that are believed to contribute to and determine a department's faculty satisfaction are represented in the research model by rectangles within the ETK Posture Box. Each rectangle conceptually has a level of execution or productivity that affects a department's faculty satisfaction. The different set of rectangles in the model illustrates the belief that there is a faculty satisfaction ranking among departments based on the number of ETK dimensions or competences developed. The research model also depicts the hypothesized direct relationships between the individual ETK competences and faculty satisfaction. These relationships are shown as arrows entering into the last rectangle at the bottom of the model, which represents a department's faculty satisfaction.

ETK Rankings

The research model illustrates department faculty satisfaction rankings based on our theory that E competences have the most positive effect on faculty satisfaction, T competences have the second most positive effect on faculty satisfaction, and K competences have the least positive effect on faculty satisfaction.

According to Rosen, Harris, and Kacmar (2009), one of the three theoretical approaches to understanding job satisfaction, the dispositional approach, focuses on how heredity and personality traits affect and are predictors of job satisfaction. According to this approach, a person's job satisfaction reflects his or her general inclination to feel good or bad about all aspects of life. This general tendency is independent of the specific nature of the job and its positive or negative characteristics (Weiss & Cropanzano, 1996). This dispositional approach provides evidence that employees are predisposed to possess positive or negative views of their job satisfaction. This finding propelled Weiss and Cropanzano (1996) to propose a fourth theoretical approach of job satisfaction called Affective Events Theory (AET).

AET provides that affective experiences such as moods and emotions play a role in determining one's attitudes and behaviors. This perspective of job satisfaction emphasizes the importance of one's possessing of emotional human competences to properly recognize, manage, and direct one's emotions at work. E competences, such as intrapersonal and interpersonal skills, facilitate one's understanding of one's own emotions and recognizing of other's emotions. An organization's employing of workers that possess the ability to properly control "events" or

"triggers" is essential and of paramount importance to a productive and efficient organization. The previous discussion invites the formulation of the following hypothesis.

> Hypothesis 4a: Where a department is classified as having only one developed competency, those departments that have only the E competency developed will have the highest levels of faculty satisfaction.

We hypothesize that T competences have the second most positive affect on faculty satisfaction based on the belief that, in order to properly use and understand technologies, an employee must possess certain socio-emotional skills. According to Eshet-Alkali and Amichai-Hamburger (2004), employees are increasingly confronted with "situations that require the utilization of an ever-growing assortment of technical, cognitive, and sociological skills that are necessary in order to perform and solve problems in digital environments" (p. 421). This skillset is referred to as "digital literacy", which is essential for success in the technological era.

A holistic conceptual model of digital literacy consists of five skills: photo-visual literacy; reproduction literacy; branching literacy; information literacy; and, socio-emotional literacy (Eshet-Alkali & Amichai-Hamburger, 2004). The last skill is the most important and complex. It broadly refers to the emotional and sociological aspects of working in cyberspace. The growth of the Internet has opened new avenues for learning and knowledge sharing, including knowledge communities, chat rooms and social networking sites. However, to take part in this new environment, a user must know how to share formal knowledge, share emotions in digital communication, identify particular personalities of other users, and avoid infectious hardware or software, amongst other specific skills. According to the five skill model, a digitally literate person must possess some emotional competences if they are to fully benefit from the opportunities of the technological era. If employees fail to fulfill obligations or meet expectations within the new global information and technological era, they will likely be reprimanded by their employers, resulting in lowered confidence and job satisfaction for the employees. The aforementioned insights allow for the advancement of the following hypotheses.

> Hypothesis 4b: Where a department is classified as having only one developed competency, those departments that have only the T competency developed will have the second highest levels of faculty satisfaction.

> Hypothesis 5a: Where a department is classified as having two developed competences, those departments that have E and T competences developed will have the highest levels of faculty satisfaction.

It is hypothesized that K competences have the least positive effect on faculty satisfaction. It is more crucial for organizations to possess E and T competences because, without them, it is impossible to create, gather, share, and store knowledge efficiently and productively.

An organization is more easily able to share explicit knowledge without their possessing of highly advanced technology competences. In contrast, tacit knowledge, which refers to personalized knowledge based on individual experience, attitudes, behaviors and "know how", is much more difficult to capture and even more difficult to share without the use of computer based

technology. Employees must not only possess the training and capabilities necessary to use the technology but they must also possess the emotional human skills to properly navigate through and exchange ideas in cyber space. Related to the ETK framework three additional hypotheses can be constructed.

Hypothesis 4c: Where an organization is classified as having only one developed competency, those departments that have only the K competency developed will have the lowest levels of faculty satisfaction
.
Hypothesis 5b: Where a department is classified as having two developed competences, those departments that have E and K competences developed will have the second highest levels of faculty satisfaction.

Hypothesis 5c: Where a department is classified as having two developed competences, those departments that have T and K competences developed will have the lowest levels of faculty satisfaction.

In accordance with hypotheses 4a through 5c, it is further hypothesized that there exists a faculty satisfaction ranking among the number of developed levels of E, T, and K competences where a department possesses all three competences. Considering faculty satisfaction, the following hypotheses can be designed.

Hypothesis 6a: Faculty satisfaction will be maximized where all three competences, E and T and K, are classified to be at developed levels.

Hypothesis 6b: Faculty satisfaction will be lesser when only two competences, E and T, or E and K, or T and K, are classified to be at developed levels, as compared to where all three competences are classified as being developed.

Hypothesis 6c: Faculty satisfaction will be further reduced where only one competency, E or T or K, is at a developed level, as compared to where two or three competences are classified as being developed.

Hypothesis 6d: Faculty satisfaction levels will be lowest where none of the competences are at developed levels, as compared to where one, two or three competences are classified as being developed.

METHODS

All data from this study were derived from an original survey that applied the ETK model concepts and faculty satisfaction research. The survey gathered information on faculty perceptions of post-secondary educational institution academic department competences, faculty satisfaction with regard to faculty contentment with a department's administration, facilities and instruction, and overall faculty fulfillment with the subject department. Data were also obtained to identify the

department within which each respondent worked and regarding each department's budget fluctuation.

Research Strategy

This study was undertaken to advance the academic understanding and application of the ETK strategic approach. The research strategy was designed for the following purposes: to further the work of Cardenas, Krishnamoorthy, & Kumar (2007); to validate the relationships between each dimension of the ETK framework and faculty satisfaction; to determine faculty satisfaction rankings based on each individual ETK dimension; to determine faculty satisfaction rankings based on each set of two ETK dimensions; to determine faculty satisfaction rankings based on all possible combinations of developed ETK competences; and, to establish a platform for continued future research on the ETK strategic approach.

The ETK strategic approach and framework was constructed by Cardenas (Cardenas & Finnigan, 2001) to consolidate accepted dimensions within organizations that contribute to performance. After Cardenas constructed the framework, Cardenas et al. (2007) later proposed additional competences and relationships aside from the three illustrated in the ETK framework. These new proposed competences and relationships include those that have a combination of attributes that cannot be uniquely grouped into the described E,T, and K dimensions. These other competences or dimensions are described by Cardenas et al. (2007) in their publication.

With this new study, Cardenas (2009) advanced Cardenas's (2001) work by creating new independent variables that strictly measure the original framework competences, E, T, and K, and measure them more precisely. Cardenas (2009) did not empirically test all the relationships introduced by Cardenas et al.'s (2007) framework, so the research could properly address the core dimensions of the original strategic approach.

Sample

Latin America served as the sample location for this study. A convenience sample was taken among 12 public-post secondary educational institutions that are members of a private distance learning network created by the International Training Center, a San Diego based company. The intended survey respondent was any faculty member working within a department of a public post-secondary educational institution in Latin America. The hypotheses were tested on these institutions, each of which employed an array of faculty, from a variety of academic departments, who took part in the study.

Survey

Research data was collected through an ETK survey/questionnaire, which was filled out by faculty. It included questions that were designed to specifically measure E, T and K competences and faculty satisfaction. The researcher crafted questions relevant to departments of academia.

The survey instrument and variable elements were developed through an extensive literature review, consultation with post-secondary education experts, and the combined 50 year experience of the authors as students and faculty members within a public post-secondary educational institution. Highly respected and published authors on the topic of emotional intelligence, technology, and KM were reviewed in the supporting literature. Suggestions and opinions on the survey's validity were sought from education, strategy, and management experts.

The survey was pre-tested, on post-secondary education faculty professors in the United States and Mexico, to ensure that the questions were clear and answerable by the respondents. These tenured professors, from three separate post-secondary educational institutions, have experience within academic departments and are knowledgeable about the organizational dynamics of educational institutions. The researcher received initial verbal feedback from the professors and also interviewed them to gain an understanding of their interpretation of the survey. This process resulted in the researcher's refining of some survey questions and multiple choice answers. Based on the pre-test, the researcher determined that the 9-paged survey, consisting of 83 questions, would be completed by each respondent within 15-20 minutes.

The survey was translated into Spanish as Spanish is the primary language of the sampled population. The respondents could either fill out an electronic survey through e-mail or respond by paper, not both. The surveys were transferred into intelligent survey software to facilitate the distribution and completion of the survey by those who filled out their surveys electronically. The intelligent survey software simultaneously distributed the electronic surveys to the e-mail addresses of all faculty choosing to fill out their surveys electronically. The paper copies of the surveys were printed on 8 ½-inch by 11-inch paper and were mailed to pre-determined coordinators in charge of distributing and collecting the surveys to and from those participating faculty members at their respective post-secondary educational institutions.

Each survey began by describing the purpose of the study. The survey results were collected over a one month period, from June 1, 2009 to July 1, 2009. We continuously contacted the coordinators in charge of distributing most of the surveys to encourage them to properly implement the surveys and to return the completed surveys before the pre-established deadline.

375 surveys were distributed and 327 completed surveys were received. The survey was given to coordinators from 12 different public post-secondary educational institutions located in Mexico, Panama, Ecuador and Peru. 327 surveys were analyzed and form the basis of this study. The response rate was 87%. It was high because many of the educational institutions sampled were eager to take part in a pioneering research study according to communications received from coordinators and based on survey responses. In addition, respondents were thoroughly informed of the study months prior to and during the distribution of the surveys and, in many cases, respondents were provided with a scheduled time within which to complete the surveys.

Measures

This section describes the measures for the research model. In addition to the hypothesized relationships, the researcher also describes the control variable measures, which (1) ensured that the survey respondents were part of the target population, and (2) provided the researcher with additional useful information for analysis. All of the E competency, T competency, K competency, and faculty satisfaction questions used a 5 point Likert scale. Each academic department evaluated by the faculty respondents was classified as having a competency "developed" if the arithmetic mean of the responses to the survey questions that corresponded to that particular competency was greater or equal to 3.

As to all the hypotheses, faculty satisfaction was measured using questions regarding four areas within departments: administration; facilities; instruction support; and, general faculty fulfillment. Among others, the survey posed questions regarding student matriculation, class scheduling, professor evaluations for students, availability of audio and visual equipment, incentives for outstanding teaching, and faculty contentment with the department as a whole.

Relationships between ETK competences and faculty satisfaction. To measure E competences, survey respondents were asked questions regarding the extent to which individuals within their academic departments foster an environment that supports communication, empathy, interrelationships amongst colleagues, global perspectives, cultural sensitivity, faculty empowerment, leadership, and positive re-enforcement.

T competences were measured through survey questions regarding respondents' technology awareness within their departments and the technology resources available to those within the departments. These specific questions focused on the current technologies within the department, the frequency of use of technology, the attainment of technology, the innovation of technology, and the use of technologies to improve efficiency and productivity.

K competences were measured through questions that asked survey respondents about the presence and use of knowledge within their academic departments. The survey posed questions regarding KM strategies, benchmarking, management support for knowledge acquisition, and continuous learning practices in the academic departments.

The results of these questions measuring E, T, and K competences were compared to levels of faculty satisfaction within those same academic departments.

Relationship between departments that have one competency developed and faculty satisfaction. Hypotheses 4a, 4b, and 4c predict that there is a faculty satisfaction ranking among departments classified as having only a single developed competency, E, T or K, where the independent variables used were E, T, and K. The dependent variable used is faculty satisfaction. The researcher tested these hypotheses by using data from only those survey responses that resulted in the classification of a department as having only one developed ETK competency.

Relationship between departments that have two competences developed and faculty satisfaction. Hypotheses 5a, 5b, and 5c predict that there is a faculty satisfaction ranking among departments classified as having only two competences developed, E and T, E and K, or T and K, where the independent variables used were E and T, E and K, and T and K. The dependent variable used is faculty satisfaction. The researcher tested these hypotheses by using data from only those survey responses that resulted in the classification of an academic department as having only two developed ETK competences.

Relationship between departments that have no competences developed, one competency developed, two competences developed, and three competences developed and faculty satisfaction. Hypotheses 6a, 6b, 6c, and 6d predict that there is a faculty satisfaction ranking among departments classified based on the number of developed levels of E, T, and K competences they possess: E and T and K; E and T, or E and K, or T and K; E or T or K; or, none. The independent variables used are those academic departments classified by the survey respondents as having all three ETK competences developed, two of the three competences developed, one of the three competences developed, and none of the competences developed. The dependent variable used is also faculty satisfaction. The researcher tested these hypotheses by using data from the entire sample of faculty respondents. Similar to hypotheses 4a through 5c, the researcher classified the departments based on whether the arithmetic mean for the E, T, or K set of questions was greater or equal to 3.

Job type, budget and faculty satisfaction. Two of the questions in the survey were not used in any of the hypotheses. However, the data gathered from the responses to these questions more accurately identified the respondents, and provided the researcher with information on the fluctuation of the budgets within each respondent's academic departments. Job type was measured using a 5-point multiple choice question. The job type selections offered to survey respondents

were Department Head, Faculty, Administrator, Staff and Other. The budget fluctuation for the department was measured using a 10-point multiple choice question that provided selections based on a range of percentage change in budgets from the previous years.

Limitations

The sampling process utilized in this study may have influenced its results. A convenience sample was taken among a group of member educational institutions of a distance learning network created by the International Training Center. Each sampled department within these Latin American institutions may have similar performance capabilities and higher levels of faculty satisfaction because of their distance learning capabilities and use of telecommunication technologies. The sampled faculty in departments within educational institutions was intended to represent the target population of faculty in departments within public post-secondary educational institutions in Latin America.

RESULTS

This section reviews the variables and results of the research study. A department's ETK competences and faculty satisfaction variables were evaluated through the measured variables E, T and K, and faculty satisfaction. Table 1 presents the descriptive statistics of the study's research variables. Table 2 presents the frequency and mean statistics of departments with "developed" competences used in the evaluation of hypotheses 4a through 6d.

Table 1
Research Variables Descriptive Statistics ($N = 327$)

Variable	Scale	Mean	Range	SD
E	1-5	3.56	1.29 - 5.00	0.88846
T	1-5	3.33	1.00 – 5.00	0.92373
K	1-5	3.47	1.10 – 5.00	0.89685
Faculty Satisfaction	1-5	3.61	1.41 – 4.96	0.75220

Table 2
Departments With Developed Competences Frequency/Faculty Satisfaction Statistics ($N = 327$)

| Departments With Developed Competences	Frequency	Faculty Satisfaction		
		Mean	Range	SD
E	17	2.93	2.04 – 3.67	0.43827
T	9	3.08	2.37 – 3.96	0.57024
K	5	3.07	2.74 – 3.30	0.21513
ET	10	2.87	1.85 – 3.30	0.46235
EK	32	3.45	1.74 – 4.33	0.52301
TK	15	3.53	2.89 – 4.19	0.40836
ETK	181	4.08	2.85 – 4.96	0.46974

All 3				
2 of 3	57	3.37	1.74 – 4.33	0.53096
1 of 3	31	2.99	2.04 – 3.96	0.44819
0 of 3	58	2.69	1.14 – 4.37	0.56360

The relationships among these variables were evaluated in SPSS utilizing Pearson's r regression analysis and the analysis of variance (ANOVA) test to compare the difference between means. All of the research study's results were tested at a 5% significance level for a two-tailed distribution. The results for the research study's six hypotheses follow.

Hypothesis 1

Hypothesis 1 was supported ($r = 0.731$, $p < .001$), indicating that there is a reliable relationship between E competences and faculty satisfaction. The hypothesis confirms that when E competences increase, faculty satisfaction increases. The hypothesis also confirms that when E competences decrease, faculty satisfaction decreases. Figure 3 presents a scatter plot, regression line, regression line equation, and the SPSS statistics of the regression analysis.
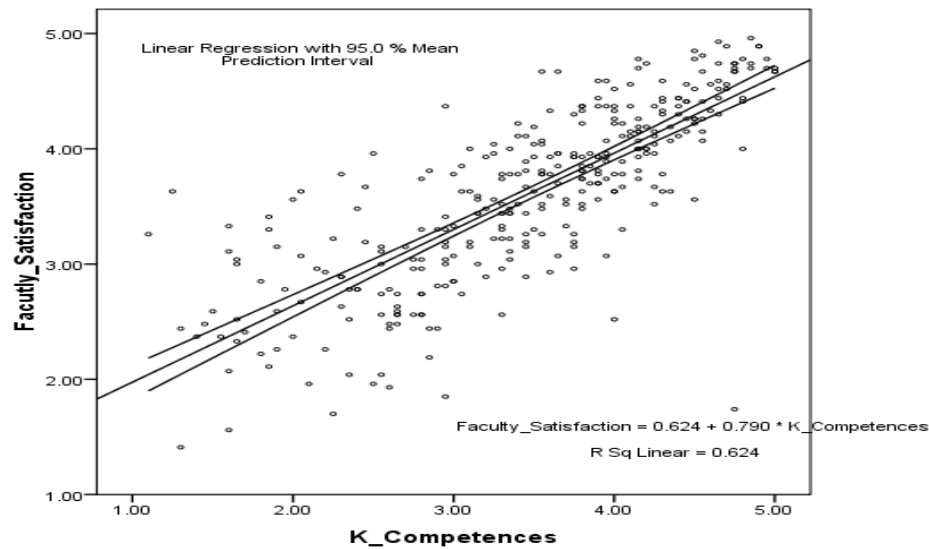
Figure 3
Hypothesis 1—Supported [$r = 0.731$, $p < .001$, $N = 327$].
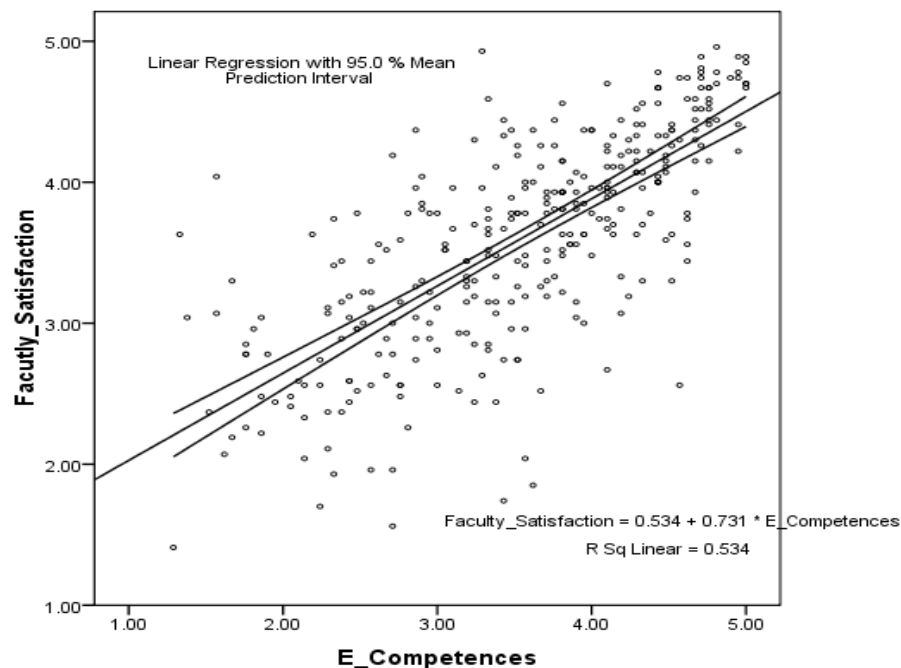
Hypothesis 2

Hypothesis 2 was supported ($r = 0.725$, $p < .001$), indicating that there is a reliable relationship between T competences and faculty satisfaction. The hypothesis confirms that when T competences increase, faculty satisfaction increases. The hypothesis also confirms that when T competences decrease, faculty satisfaction decreases. Figure 4 presents the scatter plot, regression line, regression line equation, and the SPSS statistics of the regression analysis.

Figure 4
Hypothesis 2—Supported [$r = 0.725$, $p < .001$, $N = 327$].
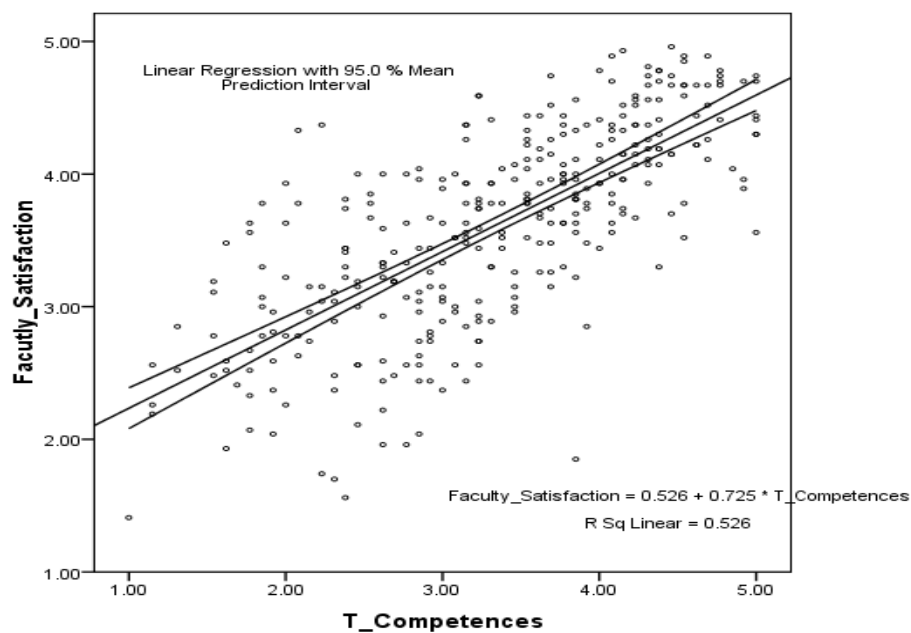
Hypothesis 3

Hypothesis 3 was supported ($r = 0.790$, $p < .001$), indicating that there is a reliable relationship between K competences and faculty satisfaction. The hypothesis confirms that when K competences increase, faculty satisfaction increases. The hypothesis also confirms that when K competences decrease, faculty satisfaction decreases. Figure 5 presents the scatter plot, regression line, regression line equation, and the SPSS statistics of the regression analysis.

Figure 5
Hypothesis 3—Supported [$r = 0.790, p < .001, N = 327$].

Linear Regression with 95.0 % Mean Prediction Interval

Faculty_Satisfaction = 0.624 + 0.790 * K_Competences

R Sq Linear = 0.624

Hypotheses 4a, 4b, 4c

The 4-category hypotheses compared all departments classified as having only one developed competency, E or T or K. Hypothesis 4a predicted that faculty satisfaction will be highest when only the E competency is developed in a department. Hypothesis 4b predicted that faculty satisfaction will be lesser when only the T competency, rather than the E or K competency, is developed. Hypothesis 4c predicted that faculty satisfaction will be the lowest when only the K competency is developed. The developed competences and the descending levels of faculty satisfaction are shown in Table 3. Statistical significance was not achieved at the $p < .05$ level for any of the six mean difference comparisons. Therefore, none of these hypotheses were supported. The ANOVA results are summarized in Table 4.

Table 3
Hypothesis 4—Single Competency Faculty Satisfaction Ranking ($N = 327$)

Hypothesis	Developed Competency	Mean	Supported	Faculty Satisfaction
H4 A	E	2.9329	No	No
H4 B	T	3.0833	No	Significant
H4 C	K	3.0740	No	Mean Difference

Table 4
Hypothesis 4 ANOVA Results ($N = 327$)

Developed Competency in Department & Mean (A)	Developed Competency in Department (B)	Mean Difference (A - B)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
E	T	-0.15039	0.21778	0.876	-0.7455	0.4448
2.93	K	-0.14106	0.14337	0.714	-0.5281	0.2460
T	E	0.15039	0.21778	0.876	-0.4448	0.7455
3.08	K	0.00933	0.21304	1.000	-0.5879	0.6066
K	E	0.14106	0.14337	0.714	-0.2460	0.5281
3.07	T	0.21304	0.21304	1.000	-0.6066	0.5879

Hypotheses 5a, 5b, 5c

Hypothesis 5a predicted that faculty satisfaction will be highest when E and T competences only are developed within a department, where only two competences are classified as being developed. Hypothesis 5b predicted that faculty satisfaction will be lesser than the aforementioned combination when E and K competences only are developed within a department. Hypothesis 5c predicted that faculty satisfaction will be the lowest when T and K competences are developed in a department as compared to the combinations set forth in the two aforementioned hypotheses. Statistical significance was achieved at the $p < .05$ level for four of the six mean difference comparisons. A ranking was established among those departments that have only two of the three competences developed minus the relationship between those departments with EK and TK competences developed. The developed competences and the descending levels of faculty satisfaction are shown in Table 5. The ANOVA results are summarized in Table 6.

Table 5
Hypothesis 5—Double Competency Faculty Satisfaction Ranking ($N = 327$)

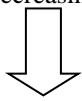| Hypothesis	Developed Competency	Mean	Supported	Faculty Satisfaction
H5 A	ET	2.8790	No	Increasing
H5 B	EK	3.4516	No	
H5 C	TK	3.5387	No	

Table 6
Hypothesis 5 ANOVA Results (*N* = 327)

Developed Competency in Department & Mean (A)	Developed Competency in Department (B)	Mean Difference (A - B)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
ET	EK	-0.57256*	0.17299	0.012	-1.0309	-0.1143
2.87	TK	-0.65967*	0.18026	0.005	-1.1347	-0.1846
EK	ET	0.57256*	0.17299	0.012	0.1143	1.0309
3.45	TK	-0.08710	0.14023	0.902	-0.4389	0.2647
TK	ET	0.65967*	0.18026	0.005	0.1846	1.1347
3.53	EK	0.08710	0.14023	0.902	-0.2647	0.4389

Note. * = The mean difference is significant at the 0.05 level.

Hypotheses 6a, 6b, 6c, 6d

Hypothesis 6a predicted that faculty satisfaction will be at its highest when all three competences are developed within a department. Hypothesis 6b predicted that faculty satisfaction will be lesser, as compared to hypotheses 6a, when only two, and any two, competences are developed. Hypothesis 6c predicted that faculty satisfaction will be even further reduced where only one, and any one, of the competences are developed. Hypothesis 6d predicted that faculty satisfaction will be the lowest, as compared to the other 6-category hypotheses, when none of the competences are developed within a department. Statistical significance was achieved at the *p* < .05 level for all twelve mean difference comparisons. The developed competences and the descending levels of faculty satisfaction are shown in Table 7. The ANOVA results are summarized in Table 8.

Table 7
Hypothesis 6—General Competency Faculty Satisfaction Ranking (*N* = 327)

Hypothesis	Developed Competency	Mean	Supported	Faculty Satisfaction
H6 A	All 3	4.0870	Yes*	Decreasing
H6 B	2 of 3	3.3740	Yes*	
H6 C	1 of 3	2.9994	Yes*	
H6 D	NONE	2.6917	Yes*	

* Significance *p* < 0.05.

Table 8
Hypothesis 6 ANOVA Results (*N* = 327)

Developed Competency in Department & Mean (A)	Developed Competency in Department (B)	Mean Difference (A - B)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
All 3 4.08	2 of 3	0.71293*	0.07852	0.000	0.5014	0.9244
	1 of 3	1.08761*	0.08774	0.000	0.8454	1.3298
	None	1.39524*	0.08183	0.000	1.1747	1.6157
2 of 3 3.37	All 3	-0.71293*	0.07852	0.000	-0.9244	-0.5014
	1 of 3	0.37468*	0.10689	0.005	0.0854	0.6640
	None	0.68231*	0.10209	0.000	0.4089	0.9557
1 of 3 2.99	All 3	-1.08761*	0.08774	0.000	-1.3298	-0.8454
	2 of 3	-0.37468*	0.10689	0.005	-0.6640	-0.0854
	None	0.30763*	0.10935	0.037	0.0121	0.6032
None 2.69	All 3	-1.39524*	0.08183	0.000	-1.6157	-1.1747
	2 of 3	-0.68231*	0.10209	0.000	-0.9557	-0.4089
	1 of 3	-0.30763*	0.10935	0.037	-0.6032	-0.0121

Note. * = The mean difference is significant at the 0.05 level.

Additional Results

This study's statistical analysis yielded no additional findings that were statistically significant at $p < 0.001$ or $p < 0.05$ levels. Additional Pearson's *r* and ANOVA tests were performed using the control variables Department and Budget. These tests were used to determine if any direct relationships existed between the control variables and faculty satisfaction, and if faculty satisfaction rankings existed based on the academic department or the increase or decrease in budget from the prior academic year. An additional ANOVA test was performed to determine if a budget ranking existed based on the academic department.

DISCUSSION AND CONCLUSION

Chandler (1962) and Ansoff (1965) believed that the formation of an organization's strategy should precede the creation of an organization's structure. Ansoff (1965) determined that the strategy implemented within an organization should be congruent to the amount of turbulence, or change, in the external environment in which the organization operates. The ETK strategic approach is a tool that complements the theories, research and results of both Chandler and Ansoff. This approach, and this study's research template and design, provide a complete method by which organizations may diagnose their own capabilities and performance, where such diagnosis is a critical first step in any organization's developing of its business strategy.

The results of the hypotheses are positive and largely support the theoretical foundations of the ETK strategic approach, framework or model. Hypotheses 1, 2, and 3 were statistically supported at a high level of significance ($p < 0.001$). These results revealed that a relationship exists between E, T and K competences, and faculty satisfaction. The results indicate that, to the

extent a department develops emotional human, E, technology awareness, T, and knowledge management, K, competences, the department's faculty satisfaction will increase. The direct relationship between these competences and faculty satisfaction provides evidence of ETK competences' positive effects on organizational satisfaction.

These hypotheses also establish three indicators of faculty satisfaction with regard to academic departments within public post-secondary educational institutions. Educational leaders, including department heads, should endorse the development of these skills through competency-building training. These leaders should also nurture existing ETK competences and attempt to use them to their competitive advantage in order to leverage organizational resources.

Hypotheses 4a, 4b, and 4c were not supported.

Hypotheses 5a, 5b, and 5c were not supported, but statistical significance was achieved at the $p < 0.05$ level for four of the six mean difference comparisons. Hypotheses 5a, 5b, and 5c were conceived to determine whether faculty satisfaction rankings exist within academic departments that have two of the ETK competences developed. The results exposed an unexpected finding with regard to these rankings. The lowest level of faculty satisfaction amongst the 5-category results (mean = 2.8790, $p < 0.05$) was found in those departments that possessed developed E and T competences. This is the opposite of the anticipated 5a hypothesis result. The results indicated that those departments that possess developed E and T competences have lower levels of faculty satisfaction than those departments that have developed E and K competences and those departments with developed T and K competences.

These results establish a faculty satisfaction ranking among departments with two developed competences. The authors believe that the reason for these results is that academic departments and post-secondary educational institutions, generally, are more dependent on knowledge and knowledge competences than any other type of organization. This is the case because, without access to knowledge from outside the department or educational institution and without the skills to create knowledge within, they cannot properly provide educational services to their primary clients, students.

Hypotheses 6a, 6b, 6c, and 6d were supported at a statistically significant level ($p < 0.05$). These hypotheses were designed to identify faculty satisfaction rankings of academic departments based on the number of ETK competences developed. Consistent with hypothesis 6a, departments that had all three competences developed were found to have greater levels of faculty satisfaction (mean = 4.0870, $p < 0.05$) than those departments that had two of three, one of three, and none of the competences developed. Consistent with hypothesis 6b, those departments that had two of the three competences developed were found to have a lower faculty satisfaction (mean = 3.3740, $p < 0.05$) than those departments that had all three competences developed, but higher faculty satisfaction than those departments with one of three and no competences developed. Consistent with hypothesis 6c, the level of faculty satisfaction for those departments that had one of the three competences developed (mean = 2.9994, $p < 0.05$) was lower than for those departments that had all three and two of three competences developed, but was higher than those departments that did not possess any developed competences. The lowest level of faculty satisfaction was found in the departments with none of the competences developed (mean = 2.6917, $p < 0.05$), in accord with hypothesis 6d.

Hypothesis 6 confirmed that those departments that have more of the competences developed have higher levels of faculty satisfaction. Similarly, those departments that have fewer of the competences developed have lower levels of faculty satisfaction. This ranking proves the progressive positive effect each group of E, T, and K competences has on faculty satisfaction. These hypotheses prove the importance of ETK competences within public post-secondary educational institution departments with regard to the number of competences institutions should develop.

Faculty satisfaction, alone, cannot reflect a post-secondary educational institution's or academic department's performance. Still, faculty satisfaction has been used as a performance indicator with regard to post-secondary educational institutions (Dalton State College Office of Institute Research and Planning, 2003). The researcher believes faculty satisfaction affects the overall performance of academic departments and post-secondary educational institutions because faculty members are major contributors to the educational services these organizations provide. While, in some industries, an employee's satisfaction does not ultimately affect and represent the final product or service, in the post-secondary education industry, an employee's satisfaction does significantly affect the final product. Faculties are an important component of a post-secondary educational institution because their jobs consist of creating knowledge and communicating that knowledge directly to their clients, the students. Faculties that are dissatisfied would likely decrease the quality of service the academic department or post-secondary educational institution provides. In the same way, a satisfied faculty would likely provide higher quality educational services.

This study advances the ETK strategic analysis by confirming that ETK dimensions affect department faculty satisfaction. The researcher planned to advance the previous academic research of Cardenas (2001) and Cardenas et al. (2007), in which, respectively, the competences were identified, and an ETK measurement tool in the form of a survey was proposed. The researcher designed a more accurate survey than the previous survey created by Cardenas et al. (2007) by posing questions that more adequately measure the described major areas influencing organizational satisfaction. The results of this research study validate a new model of organizational evaluation and employee satisfaction-forecasting, which may be referenced or used by future researchers.

This further refined and still relatively simplistic ETK approach was designed foremost to enable educational institutions to quickly and cost-effectively measure the ETK dimensions and, consequently, their faculties' satisfaction. It was also designed to provide administrators, faculty and staff with a guide by which they may calculate and analyze ETK survey results. The new research model and survey are valuable tools for all organizations and consulting firms. This study demonstrates that an organization may begin to create a more efficient organization by first identifying its levels of developed ETK dimensions and addressing competences that are at low levels, before it increases management, administrative and financial costs on other potentially expensive and ineffective tools and/or resources.

RECOMMENDATIONS FOR FUTURE RESEARCH

The findings of this study provided interested researchers many possible paths to further the understanding and development of the ETK strategic approach. Specifically hypothesis 4, 5b,

and 5c were not supported because of a lack of statistical significance, likely because of the lack of sample size. Hence, these hypotheses could be retested by another researcher who can get a larger sample. Hypothesis 4 was conceived to establish faculty satisfaction rankings among those departments that have only one ETK competency developed. If rankings can be empirically proven then this would greatly contribute to management practice because importance can then be given to the ETK competency that more greatly affects faculty satisfaction.

Future research could also be directed towards repeating a similar research study in post-secondary educational institutions but using student satisfaction instead of faculty satisfaction as the performance indicator. This would provide data from the clients or consumers perspective and could uncover other significant statistical trends or areas of interest.

Future research could also be focused on repeating this same study in public educational institutions in other geographic regions such as the United States, Canada, Africa, Asia, and Europe. This could uncover different relationships and rankings, or add to the empirical proof of the ETK strategic approach. Implementing this research design in an underdeveloped region would likely increase the sample of departments with low number of ETK competences. This would help in confirming hypothesis 4.

The ETK model could also be tested in a different industry such as manufacturing, banking, tourism and hospitality, biotechnology, etc. The ETK survey tool could be used to measure the separate ETK competences but a different performance indicator or indicators would have to be used that more accurately measure performance for that industry. Performance measures could consist of input, process, or output measures of an organization. Comparative studies could also be done using data from organizations in the same industry but in different countries or geographic regions.

Additional research could also be done by performing a longitudinal study whereby the ETK survey tool is implemented in an organization over a long period of time. This could provide further insight into remedial actions to improve and develop ETK competences, as well as more empirical evidence of the direct relationship between ETK competences and satisfaction.

There are many competences that cannot be classified as E, T, or K competences. According to Cardenas et al. (2007) some competences can be characterized as a combination of the three original competences (i.e. ET, EK, TK, ETK competences). Cardenas et al. developed questions to measure these other competences, but they have not been empirically tested. Future research could consist of testing these questions and competences to expand the ETK model.

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GLOBAL IMPACT OF A BUSINESS SCHOOL DEGREE: INTERNATIONAL ALUMNI VOICE

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ABSTRACT

Business schools in English-dominant countries host significant numbers of international students. In the U.S., where few students remain in the country to work, little is known about the role of English language proficiency and employer-valued outcomes on students' professional success. This study reports survey findings from international alumni on the development and impact of learning outcomes, particularly English proficiency. Participants felt they had acquired outcomes valued by employers and reported using English in their work. The study indicates a need for more institution-specific studies to increase knowledge of a population with a significant presence in schools of business.

Of the 4.6 million globally mobile students seeking education outside their countries, approximately 1 million study in the U.S. (American Council on Education, 2010; Institute of International Education [IIE]; 2016). Concentrations of international students in higher education institutions vary from country to country and across institutions and programs, however (IIE, 2016). In the U.S., international students comprise 5.2% of higher education enrollments with just over 20% choosing to study business and management, making it the most popular major for these students (IIE, 2016).

Given this, business schools hosting these students would greatly benefit from knowing how international students fare during their studies and after graduation so as to enhance their programs, yet the percentage of AACSB-accredited schools who survey alumni has decreased—from 75% to 29% between the years 2005 and 2015 (Kelley, Tong, & Choi; 2010; Martel & Calderon; 2005; Pringle & Michel, 2007; Wheeling, Miller, & Slocombe, 2015).

Similarly, business graduate programs hosting large percentages of international students report rarely contacting them after they graduate to learn about students' experiences studying in the U.S. or to determine their level of preparation for employment (Andrade, Evans, Hartshorn, & Davis, 2018). The schools who do contact their international alumni primarily do so to determine employment status and salary levels.

This study seeks to fill the gap in what business schools know about their international graduates by asking alumni to comment on their on-campus experiences, learning outcomes, and the impact of skills obtained on employment. The research questions are as follows:

1. What are the goals of international students in schools of business?
2. How do international business graduates view their abilities related to the learning outcomes valued by employers and what do they perceive as contributing factors?
3. What impact do English language skills have on the professional success of international students who graduate with business degrees?

LITERATURE REVIEW

A number of research areas are relevant to this study. We focus on those that provide insights into the research questions: goals, learning outcomes, and English language proficiency.

Goals

A primary and recent source of information on international student goals and satisfaction is a large-scale survey of applicants for foreign credential evaluation, most of whom were enrolled in U.S. higher education institutions or were graduates from these institutions, and a few of whom had chosen to study in a country other than the U.S. (Roy, Lu, & Loo, 2016). The study sought to fill a gap in terms of information about goals, the impact of satisfaction on retention, and variables that affect these outcomes. It is particularly relevant as it represents close to 5,000 international students across varying types of institutions.

Findings indicate that "the biggest overall motivator to study abroad is the belief that the education systems in destination countries . . . are comparatively better than those in [students'] home countries" (Roy et al., 2016, p. 3). Motivation is also derived from the desire to study a

specific program at a particular university and anticipated advantages for career and work opportunities, including gaining work experience in another country. Other reasons are the international experience itself, English language improvement, possible immigration, and financial aid from the students' government or employer.

Goal achievement can be indirectly examined based on student satisfaction. When students are satisfied with various aspects of the institution and their experience, they are more likely to achieve their purposes for enrollment. The majority of international students, over 90% of those responding to the survey cited above, indicated satisfaction with academic quality in the form of faculty expertise, learning support services, evaluation of their academic performance, and courses offered, and somewhat less with research opportunities (84%). Other aspects of the university experience had varying levels of satisfaction: 87% were satisfied with academic advising, 79% with counseling, 78% with orientation, 76% with international student offices, 73% with English language courses, 66% with scholarship availability, and 63% with housing.

The biggest challenges were tuition costs (65%), cost of living (63%), social connections (33%) (60% for students from China), loneliness (32%), English proficiency 24% (48% for students from China), difficulty adapting to academic culture (21%), meeting academic requirements (18%), visa regulation issues (18%), and discrimination (16%) (Roy et al., 2016). Retention is impacted when students become dissatisfied with their initial institution of enrollment. The primary reason for students leaving their first institution was a mismatch in expectations, which suggests that their goals for studying abroad were not being achieved. International students who transferred to another institution were five times more likely to indicate dissatisfaction with their first institution than those with no intent to transfer, and nearly 60% of those indicating no intent to transfer expressed satisfaction with their current institution (Roy et al., 2016).

The majority of participants believed their education in the U.S. was a good investment, and those who had graduated and were employed were particularly satisfied and likely to recommend their institutions to others. As such, it appears that international students are primarily accomplishing their goals for study, but institutions must consider all aspects of the student experience, "even beyond graduation" (Roy et al., 2016, p. v) to ascertain how effective they are in fulfilling the expectations of these students. It should also be noted that the results cited varied depending on origin of country, as in the examples of Chinese students having higher than average struggles with social interaction and English language proficiency. Also, results were not disaggregated by students' majors; therefore, it is unknown if those studying business and management differed in their views from those in other majors.

English Language Proficiency

Although some assume that international students graduating from U.S. institutions of higher education will return to their countries and predominantly speak their own languages, students themselves indicate that this is not the case, and that particularly in the business world, English and high levels of English are almost a given to obtain a job (Andrade, 2018). They report that they are interviewed in English and selected not only for their proficiency in the language, but also cultural knowledge. Some also admit that they had very weak skills even after four or more years in a U.S. university. Other sources concur with the critical need for English proficiency for global employment, pointing to a gap between the number of available employees with requisite English skills and those needed to fill positions (Cambridge English, 2016).

In the U.S. context, most students do return to their homelands after graduation although some stay on a short-term basis for practical training; school of business deans report that these students need strong English skills to be competitive for these opportunities (Andrade et al., 2018). In other cases, however, not much is known about the degree to which students' English and discipline-based skills prepare them for professional positions in their home countries. In contrast, many international students in Australia stay permanently in the country, which has created greater visibility of English proficiency issues. This situation is reflected in the following quote:

> The Business Council of Australia has expressed concern that many international students are graduating with the requisite technical skills to enter the professions, but are unemployable because their English-language proficiency and broad cultural and social skills are judged to be inadequate by employers. The BCA notes this situation is reflected in the labor market, where international student graduates experience far greater difficulty gaining employment in the professions than do local graduates and immigrants who have been trained in other OECD nations (Nyland, Forbes-Mewitt, & Härtel, 2013, p. 669).

Similar views have been expressed of accounting and nursing graduates: "Many international students have knowledge of technique but not the language skills required to communicate effectively with clients" (Nyland et al. 2013, p. 670).

English-medium institutions in hosting countries have different philosophies of English language development. In the U.S., the traditional approach has been one of support, or providing students with optional services and resources to which students may be referred or seek on their own (Andrade, Evans, & Hartshorn, 2014, 2015, 2016). Australian institutions, in contrast, have moved to a development approach in which English proficiency needs are embedded into discipline-based coursework (Andrade, Evans, & Hartshorn, 2017; Andrade, Evans, Hartshorn, & Gates, 2017; Arkoudis, Baik, & Richardson, 2012; Benzie, 2010; Haugh, 2014). The rationale for this is the high percentage of international students in Australian higher education institutions and the issue raised earlier about students not graduating with the English skills needed for employment. Consequently, English language development has become a key priority.

Learning Outcomes

Business is the top choice of major for international students in many countries (e.g., U.S., UK, Australia), and produces more international graduates than other areas of study— in the UK, 37.6% of students studying business are international (UK Council for International Student Affairs, 2018), and in Australia, 60% of all business graduates are international (McGowan & Potter, 2008). In spite of this, information about learning outcomes is typically not disaggregated for this population at either the institutional (Andrade, Evans, & Hartshorn, 2017) or national levels.

Schools of business accredited by AACSB are required to identify and measure student learning outcomes, and although business programs host the preponderance of international students, no AACSB standards focus on these students. On the other hand, the national accrediting agency for higher education in Australia has good practice principles specific to international students (Australian Universities Quality Agency; 2009) due to the fact that Australia has a high concentration of international students (approximately 20%; IIE, 2016). The Australian

government also tracks its graduating cohort of international students to ascertain information about employment and salaries, but does not go deeper than this (International Education Association of Australia, 2017).

The Chartered Association of Business Schools (2017) in the UK administers a national survey in which students are asked to rate their institutions on factors such as teaching, learning, assessment, academic support, organization and management, learning resources, learning community, and student voice, but disaggregated information, if any, is not publicly available. In the U.S., deans of business schools and heads of departments of business programs with large percentages of international students do not disaggregate learning outcomes data (Andrade, Evans, & Hartshorn, 2017; Andrade, Evans, Hartshorn, & Davis, 2018). They do indicate providing language intensive assignments in which oral and written skills are emphasized, but in most cases, do not examine assessments from international students who speak English as a second language to determine specific needs or outcomes. Similarly, for international students generally, department heads indicate not reviewing institutional outcome markers such as GPA, retention, or persistence, National Survey of Student Engagement (NSSE) results, or institutional survey findings such as those from graduating students, alumni, or employers to obtain specific data relevant to international student experiences and outcomes (Andrade, Evans, Hartshorn, & Gates, 2017).

Cross-cutting skills and abilities for higher education graduates, such as communication, critical thinking, problem-solving, teamwork, diversity, and ethical reasoning have been identified by employers as being critical to success, and are often referred to as essential learning outcomes (ELOs) (Hart Research Associates, 2015). Some large-scale measures provide insights into the degree to which students attain these outcomes, and in limited cases, comparisons are made between domestic and international students. Global Perspective Inventory findings, for example, showed that international students rated sense of community and the belief that faculty challenged their viewpoints or brought in diverse cultural perspectives students lower than domestic students (Glass, Buss, & Braskamp, 2013).

The most common measure of cross-cutting learning outcomes is the National Survey of Student Engagement (NSSE) in the U.S., and the Australasian Survey of Student Engagement (AUSSE) in Australia. These measures report on behaviors considered to be engaging and to positively impact learning such as academic challenge, active learning, faculty interactions, supportive learning environment, and enriching educational experiences. Findings indicate that U.S. international students have higher overall levels of engagement, specifically in student and faculty interactions, than in Australia, but international students in Australia report more engagement overall than their domestic counterparts (Coates, 2010).

Participation in high-impact practices (those associated with the achievement cross-cutting learning outcomes) is higher for U.S. international students than domestic students in service learning (in both first- and senior-year), first-year research with faculty, and senior year study abroad (NSSE, 2017). However, these levels are not necessarily high. For example, only 6% participate in research with faculty. In other cases, engagement in these practices are lower for international than domestic students—e.g., learning communities in the first and senior year, senior-year internships, research with faculty, and culminating senior experiences.

Overall, minimal information is available pertaining specifically to international student learning outcomes on any type of measure—institutional or national. It could, however, be obtained with a little effort, such as by disaggregating program and institutional measures. All

higher education programs are required to do assessment, and for those hosting large percentages of international students, such as schools of business, disaggregated data could be revealing and helpful. Without it, schools of business cannot fully determine their effectiveness.

METHODS

Participants in this study included international students from countries where English is not the dominant language who graduated with an undergraduate degree in a business field or with an MBA from a large, regional institution in the Western United States. The university is open enrollment although students majoring in business need to be accepted into the major by meeting certain grade requirements on foundational accounting, information management, economics, management, and marketing courses. The university has over 5,000 business majors, of whom approximately 4.5% are international at the undergraduate level and 6% at the graduate level. The university as a whole has an international student enrollment of 2%. Business is the highest enrolled major, accounting for 19% of enrollments.

Construction of the survey instrument was consistent with guidelines from Nardi (2018) for exploratory research. Drawn from the literature and research questions, the instrument was designed to explore campus experiences, learning outcomes, and the impact of developed skills on employment. In addition to critical quantitative items, the survey included open-ended items to explore, expand, and clarify information shared by the respondents (Ballou, 2008). Once completed and refined, the instrument was then distributed to alumni who had studied business at a large regional university in the Western United States and had graduated in the past three years. Although the survey was only completed by 31 graduates, this represented a response rate of 36% of the 87 graduates targeted. Participants provided rich data for analysis and represented a variety of regions such as Central/South America, Africa, and Asia.

RESULTS

The first research question addressed the goals of international students studying business. Respondents were presented with a variety of reasons for studying business in the U.S., including the need to obtain qualifications for their future careers, the desire to expand knowledge and experience by living in another country, the program of study was not available their home country, and an *other* option. The degree to which respondents endorsed specific reasons varied significantly, $X^2(3, N = 90) = 27.038$, $p < .001$. Adjusted standardized residuals (ASR) (Residuals greater that 1.96 are considered statistically significant). were examined to identify where differences were meaningful. *Obtaining qualifications for future career* occurred the most frequently and differed significantly from the other items (ASR= 3.6, $p < .001$). *Program not available in my home country* occurred least frequently and also differed significantly from the other items (ASR= 4.0, $p < .001$). These results are displayed in Figure 1.

Figure 1: Reasons for studying in the United States.
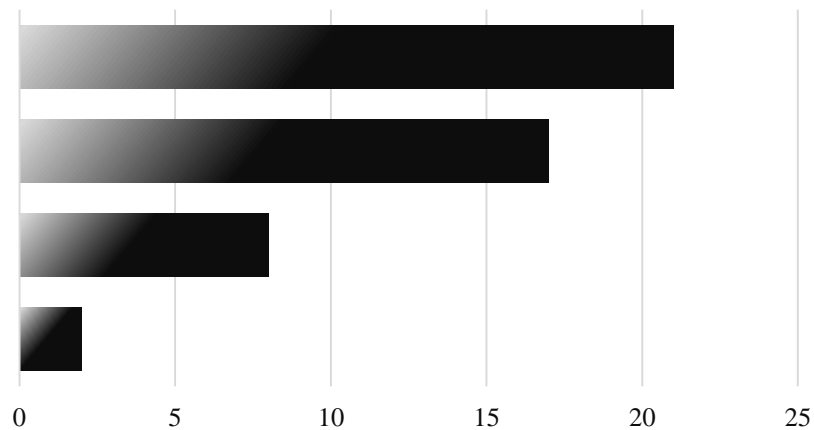
Some respondents listed additional reasons for studying in the US under the *other* category. For example, one student who had already completed a master's degree saw this educational opportunity as a "way to come and live in the US." Other responses included a desire to gain additional knowledge and experience at the master's degree level, the goal of further developing English communication skills, the appeal of receiving an internationally accepted degree, and the hope of being able to receive a one-year work permit for optional practical training following graduation.

The second research question focused on international business graduates' views of their abilities related to the learning outcomes valued by employers and factors that contributed to the achievement of these outcomes. These questions were based on the cross-cutting skills valued by employers and those specifically identified by the school of business where the study took place. Based on 7-point scale ranging from strongly disagree (1) to strongly agree (7), there was no overall statistically significant difference in perceived ability in areas such as expressing oneself in writing, expressing oneself verbally, making effective presentations, using information to make appropriate decisions, demonstrating a global perspective, problem solving, demonstrating ethics, and an awareness of basic business concepts, $F(3,85)=2.43$, $p=.055$. Moreover, average responses for each of these outcomes fell between *agree* and strongly *agree.* suggesting that respondents generally believed that outcomes were achieved.

Though no statistically significant differences were observed overall for perceived outcome achievement, a few meaningful differences were observed depending on the ways in which the students developed their cross-cultural skills or intercultural understanding. The survey included options such as *through coursework and assignments*, *interactions with diverse students in class*, *interactions with diverse students out of class*, *I don't feel I developed intercultural skills* and *other*. None of the respondents indicated that they had not developed intercultural skills during their study. Nevertheless, those students who indicated that they developed these skills through interacting with diverse students in class also perceived greater achievement in two outcomes compared to those who did not develop these skills in class. These include greater functional knowledge of business concepts ($p=.034$, $\eta_p^2 = .173$) and a greater ability to express knowledge

and ideas in writing ($p=.019$, $\eta_p^2 = .208$), both of which produced large effect sizes (see Table 1 for related descriptive statistics).

Table 1:
Achievement of Outcomes Associated with Development of
Intercultural Understanding Through Strategic Efforts

| Outcomes	Coursework and assignments				Interactions with diverse students in class				Interaction with diverse students out of class			
	Utilized		Unutilized		Utilized		Unutilized		Utilized		Unutilized	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Global perspective and cultural understanding	6.67	.485	6.37	1.061	6.67	.483	6.20	1.304	6.47	.772	6.86	.378
Aware of responsibility to behave ethically	6.56	.616	6.25	.886	6.52	.602	6.20	1.095	6.37	.684	6.71	.756
Can express knowledge and ideas in writing	6.44	.616	6.25	.707	6.52	.512	5.80	.837	6.47	.512	6.14	.900
Functional knowledge of business concepts	6.33	.970	6.37	.744	6.52	.512	5.60	1.673	6.47	.513	6.00	1.528
Can express knowledge and ideas verbally	6.17	.786	6.25	.886	6.19	.814	6.20	.836	6.16	.688	6.29	1.113
Can utilize procedures to solve problems	6.28	.826	6.00	.926	6.33	.658	5.60	1.342	6.26	.653	6.00	1.291
Can apply processes to find solutions	6.33	.767	5.88	.835	6.29	.717	5.80	1.095	6.21	.713	6.14	1.069
Can make professional presentations	6.00	1.190	6.25	.433	6.14	1.014	5.80	1.095	6.21	.713	5.71	1.604

The third research question addressed the impact of English language skills on the professional success of international students who graduate with a business degree. In response a survey question about whether English proficiency was considered when the respondent applied for jobs after graduation, 86% reported that it was considered. In answer to a related question, more than 93% of the respondents indicated that they use English in their current job. When asked about the skills in which the employers in their respective countries were most interested, 21% reported oral and written communication, 21% indicated critical thinking and problem solving, 20% specified English language competency, 19% stated ability to work in a team, and 19% indicated knowledge and skill for a particular profession. With so many respondents reporting that they use English in their employment, it follows that emphases such as working in teams, critical thinking, and problem solving will often be accomplished in an English language context.

The survey also inquired about students' perceptions of their English language proficiency at the time of enrollment and upon graduation. Numbers were used to represent four proficiency levels, including beginner (1), intermediate (2), advanced (3), and superior (4). On average, participants reported that their English language proficiency improved from a level a little higher than *intermediate* at the time of matriculation ($M = 2.26$, $SD = .999$) to a proficiency level of a

little higher than *advanced* at graduation ($M = 3.26$, $SD = .729$). This difference was statistically significant, $t(30) = 6.502$, $p < .001$, and produced a large effect size, $d = 1.144$. Responses are further broken down by proficiency level for matriculation and graduation in Figure 2.

Figure 2: Perceived language proficiency at the time of graduation versus matriculation.
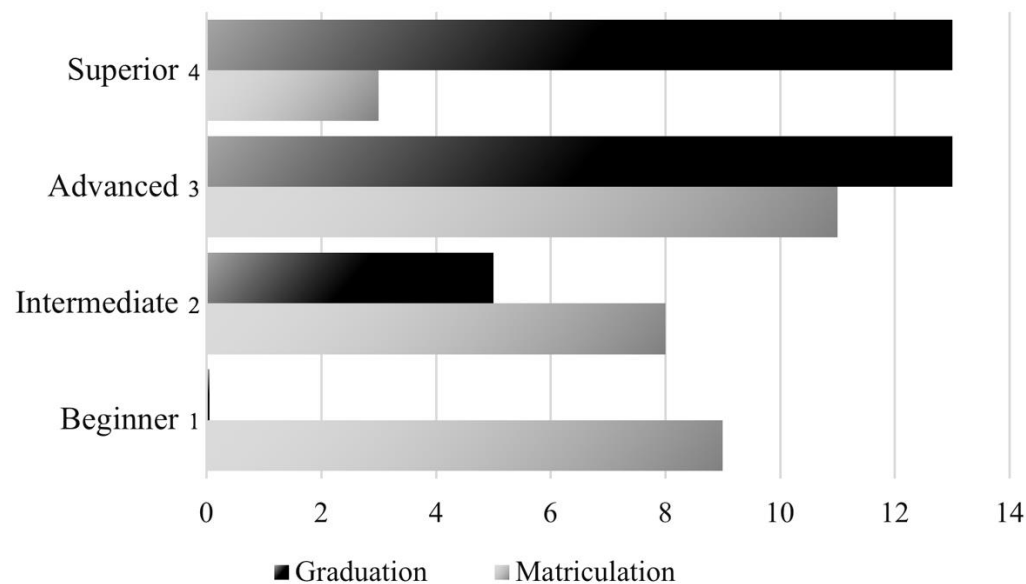
However, there was no statistically significant difference for perceived language development based on who the students associated with the most during their study, whether it involved people from their home countries, other international students, members of a particular organization, or locals, $F(1,4)=2.043$, $p=.125$.

Nevertheless, the lower the perceived English language proficiency at the beginning of university study, the more likely the student tended to associate more with international students compared to the locals. Though just beyond what might be considered statistically significant, $F(1,22)= 3.79$, $p=.064$, this analysis produced a large effect size, $d=.820$ (see the descriptive statistics for this analysis in Table 2).

Table 2: Proficiency Level by Predominant Associations

Association	*M*	*SD*
International	1.94	.929
Domestic	2.75	1.035

DISCUSSION AND IMPLICATIONS

Although the large-scale study cited in the literature review indicated that international students' goals for coming to the U.S. were largely due to the belief that higher education was better in the U.S. than in their own countries (Roy et al., 2016), this was not the case for this particular group of alumni, perhaps because they had chosen an open admission institution and thus were not seeking a specific highly recognized degree from a particular institution. For these alumni, the goal was simply to obtain qualifications for a future career, which does reflect other responses on the national survey (e.g., career and work opportunities) as does seeking the experience of living in another country.

In terms of developing valued learning outcomes, respondents in this study largely felt they had attained them, which suggests a degree of satisfaction in achieving their goals and a level of preparation for professional success. Also, of interest is that those who indicated developing these outcomes through interactions with diverse others in class also rated themselves higher on communication skills and business knowledge than those who did not indicate developing these skills in class. Both of these outcomes are critical for schools of business, thus insights into how international students acquire them is beneficial.

This finding also shows how interaction with diversity may impact the development of desired skills, which has implications for admission practices (recruiting a more diverse student body) and pedagogical approaches (e.g., diverse teams, group work, etc.). The fact that in other studies, international students felt faculty did not bring in diverse cultural perspectives at least to the extent that domestic students did (Glass, Buss, & Braskamp, 2013), suggests that this is an area that needs more attention and could positively impact learning outcomes.

Consistent with findings of previous studies (e.g., Andrade, 2018; Andrade et al., 2018), the participants in this study clearly indicated the need for high level English language skills for employment. The findings also provided evidence that the cross-cutting skills desired by U.S. employers (e.g. oral and written communication, teamwork, critical thinking, problem solving) are also valued in global contexts. Encouragingly, respondents felt their English language skills had improved from the time of admission to graduation regardless of whom they reported associating with the most. This is a particularly intriguing finding as it is a commonly held belief that interaction with native speakers will have the greatest advantage in language gains.

However, these participants, particularly those who rated their incoming skills lower than others, tended to associate more with other international students. If international students have different home languages, one can assume English is being used for communication, which provides beneficial practice, but perhaps not needed language modelling. Students with higher levels of English proficiency are more likely to be sufficiently confident to interact with native speakers and as such, to learning more about the host country, a stated goal of international students in this study as well as other studies (e.g. Roy et al., 2016).

Implications

The findings underscore that the aspirations of international students studying in the United States are largely associated with their ability to prepare for a successful career, and that one vital element needed for their success is competence in English. Fortunately, results from this study suggest that English language proficiency is generally perceived to increase dramatically between

matriculation and graduation. These findings also suggest that, on average, students largely achieved programmatic outcomes in an English context that were closely tied to employer expectations, including areas such as expressing oneself in writing, expressing oneself verbally, making effective presentations, using information to make appropriate decisions, demonstrating a global perspective, problem solving, demonstrating ethics, and an awareness of basic business concepts.

Nevertheless, these results also suggest that the lower the English proficiency at the outset of study, the more likely international students are to interact with other international students rather than domestic students. While this kind of interaction may foster empathy and other kinds of useful support, it may not provide students with the most productive contexts in which to develop their English language skills. Program administrators may benefit by considering systematic ways to facilitate strategic interaction of their lowest English proficiency students with other domestic students.

Additional results relevant to programmatic outcomes suggest that neglecting some strategic efforts to foster intercultural understanding may undermine student achievement of the program outcomes. For example, international students who sought to develop intercultural understanding through interaction with diverse students in class perceived greater achievement of program outcomes such as more effectively expressing ideas in writing and gaining greater knowledge of basic business concepts.

In sum, key takeaways from this study that may prove of value to schools of business are as follows:

- Institution-specific studies can uncover variations in the international student experience that are informative to individual schools of business and suggest specific directions that "best practices" may not reflect (e.g., goals, factors that impact English language development). Thus, there is a need to renew commitment to collecting data about alumni and employer perspectives on satisfaction and learning outcomes.
- Employers in international contexts highly value English language proficiency and students need this skill to attain their professional goals; thus schools of business need to focus their attention on helping students develop professional level English skills along with other broad learning outcomes. This provides additional support for assessment practices and particularly on closing the loop so that assessment findings result in curricular and pedagogical improvements. Also, while this study showed that English proficiency is in demand globally and that students feel their skills improved, the employer perspective is still largely unknown with respect to U.S. higher education graduates as compared to Australia where this skill has been found lacking in international graduates (Birrell, 2006; Nyland et al, 2013).
- Other English-medium institutions hosting international students have changed their approach to English language development due to employer feedback (Arkoudis et al., 2012); however, U.S.-based schools of business have yet to obtain this information.

Each of these points has at its core a lack of knowledge about the perspectives of international student alumni and their employers in terms of goal achievement, learning outcomes,

and professional success. With fewer and fewer schools of business collecting this type of data or collecting data related to only employment rate and salary indicators, much valuable information is being missed that could inform and improve current practice.

CONCLUSION

Evaluation of outcomes is critical to the continuing success of students enrolled in business programs in the U.S. and other global destinations. Educational providers in the U.S. are relatively unconcerned about this issue since students do not stay in the country and work, but little is known about how they fare when they return home, which has implications for future recruitment and placement. This study has taken a first step to address this issue.

Academics can make a significant contribution to the regulatory network by undertaking critical analyses of the international education "industry," the policies and practices embraced by governments and education suppliers, the lived experience of international students, their teachers, and support staff, the rights that belong to these individuals and the extent to which these rights are respected, and how international students can be educated to the reality of studying in a foreign country before and after they leave their homeland, and so on" (Nyland et al., p. 670).

Although this study consisted of a small sample size and was specific to one institution, the literature review and the findings contribute understanding the "lived experiences of international students" (Nyland et al., 2013, p. 670). They indicate a need for schools of business to be more strategic in learning about the experiences and outcomes of their international students and alumni. An enormous gap exists in what schools know about these individuals—this information is simply not being collected; this study is a first step to filling that gap in the U.S. context for schools of business, who host more international students than any other major.

In spite of more than a decade-long emphasis on learning outcomes assessment in higher education and AACSB-accredited schools, much remains to be known about how the curriculum meets employer expectations and graduates' goals. This study indicates an opportunity for schools of business to pursue further information about their current international students and alumni that could have a significant impact on their national and global reputation.

Although participants in this study felt they had achieved the learning outcomes identified by the school of business from which they graduated, employer views are largely unknown. Nationally, recent college graduates rank their abilities on these skills significantly higher than do employers (Hart Research Associates, 2016), which may also be the case here. Overall, the findings suggest the need for more institution-specific studies of this nature in order to form a more comprehensive view of U.S. schools of business and the ways in which they are fulfilling their commitments to international students and to their future employers.

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HISTORY OF GLOBALIZATION:
ECONOMIC GLOBALIZATION

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ABSTRACT

This treatise illustrates the history and evolution of globalization. The following research project addresses the changes that took place in the process of globalization in the world over time. The paper offers implications of globalization on international business and management practice. The focus is on the globalization of national economies. It covers the history of globalization, the process, and components of economic globalization, advantage, and disadvantages of global trade, and global politics. The effects of economic, political, technological factors on globalization are discussed.

Globalization, the integration of one culture into another through various types of interactions, has been occurring for a millennium (Held, McGrew, Goldblatt, & Perraton, 1999). The catalysts have been many, from simple exploration to military incursions, to the diffusion of religion, to academic study, to tourism, and to trade. Moreover, while all have and continue to play a role in globalization, trade has most consistently been at the forefront as the catalyst of all catalysts. For centuries, people from different continents have used the Silk Road, an early network of trade routes across Asia and Europe in the middle ages, to trade for items unique to one area and coveted by others. From spices to pasta and tea to gold, trade and its ability to make its agents wealthy have driven people's interactions, regardless of ongoing military conflicts and ideological differences.

Our modern, and largely Western, perspective of globalization began in the Middle Ages, as the primary Western nations of the time, including the Netherlands, England, France, Spain, Portugal, and Italy sent explorers and legions around the world to search for precious metals and items for exchange, usually items that made life easier and more enjoyable (Gregory & Stuart, 2013). This process occurred well into the 1800s to the extent that today the origins of products such as potatoes, tobacco, tea, coffee, pepper, collard greens, mustard, and more recently quinoa, are not known to most people. Over the last century or so an even broader array of products and services have evolved that drive globalization, including music, literature, financial services, and movies. More recently, the process of globalization has been accelerated even more by advances in information technology (IT).

Globalization is a global exchange of products, services, capital investments, technology, knowledge, human resource become progressively interrelated. Globalization is a process of partnerships and collaboration among individuals, businesses, and governments from different countries (Held et al., 1999). The process is propelled by global trade and capital, which is supported by advancements in IT. This globalization process affects the natural environment, cultures, politics, and economic development of nations around the world. Globalization of economies is about developing economic interactions among national economies around the world. It facilitates the process of exchange of products, services, resources to accomplish a competitive advantage. The globalization of enterprises often encompasses the lessening of global trade regulations and tariffs, taxes, and other barriers that suppress international trade. The economic globalization is demonstrated by increasing economic integration among nations. It may lead to the development of a worldwide market or a one interconnected world marketplace. Such a situation is beneficial for some countries and business entities in certain situations and not for others.

Data is emerging that the economies open to trade with others become wealthy, and those that try hard to keep the rest of the world at bay tend to end up becoming poorer (Rodrik, 2012). Especially when it comes to issues such as trade, what economics shows is that the intuitive answers are not always accurate, and correct information can be understood by applying a collection of economics analysis (Collier, 2008). Economic theories and assumptions can be open to different interpretations. Although economics is considered a science that is a systematic method of examination, it is not a science that an experiment can be repeated with the outcome being predictable (Backhouse, 2010). Human beings' behaviors are not always predictable, and even when they are predictable in controlled cases, the mere fact that we can observe, learn, and change our minds means that our actions can change drastically in the future (Halteman & Noell, 2012). This observation means that there is ample room for disagreement in global economics,

and this area of study in international business should be an exciting topic that allows to go forth, research and examine. This essay on recent shifts in global economics will examine the overview of the economic effects of global trade and current issues associated with the international marketplace.

ECONOMIC GLOBALIZATION

The globalization of economies can be regarded as both a positive and a negative situation for a nation. Economic globalization involves the globalized integration and competition of production, markets, technology, and corporations and industries around the world (Collins, 2015). Current global trends can be accounted for by advanced economies integrating with emerging economies utilizing foreign direct investment (FDI), the weakening of trade blocks and other financial deregulations.

Data is emerging that the economies open to trade with others become wealthy, and those that try hard to keep the rest of the world at bay tend to end up becoming poorer (Rodrik, 2012). Especially when it comes to issues such as trade, what economics shows is that the intuitive answers are not always accurate, and correct information can be understood by applying a collection of economics analysis (Collier, 2008). Economic theories and assumptions can be open to different interpretations. Although economics is considered a science that is a systematic method of examination, it is not a science that an experiment can be repeated with the outcome being predictable (Backhouse, 2010). Human beings' behaviors are not always predictable, and even when they are predictable in controlled cases, the mere fact that we can observe, learn, and change our minds means that our actions can change drastically in the future (Halteman & Noell, 2012). This observation means that there is ample room for disagreement in global economics, and this area of study in international business should be an exciting topic that allows to go forth, research and examine. This essay on recent shifts in global economics will examine the overview of the economic effects of global trade and current issues associated with the international marketplace.

OVERVIEW OF GLOBAL ECONOMICS

Over the last few decades, more products that people consume, and use have been made in overseas countries (Steger, 2013). In those distant countries, more people watch United States (U.S.) Hollywood movies, use U.S. computer and consulting services, and eat U.S. food. So, what does it mean when they hear that markets are globalizing and that the world is becoming a flatter place? This flatness simply means that individuals, businesses, and nations around the world are trading more resources with each other to improve living standards and the quality of life (Friedman, 2007).

The fact is that no matter where people go or what they do, they are part of a global economy whose participants coordinate production and trade products and services across borders to a degree we never have seen in the past (Thomas & Inkson, 2009). Furthermore, globalization is an ongoing process, and economic interrelationships between individuals, multinational

enterprises (MNEs), and countries continue to multiply and grow. From the previous examples, it is easy to understand that a large part of what is consumed in the U.S. is produced internationally.

The Flow of Global Economics

There are a few types of flow of economic activities that connect members of the global economy together (Menipaz & Menipaz, 2011). First, the flow of products and services are illustrated by how the U.S. imports products from other nations and exports to other countries. Although one often hears about who gains and who loses in the process of trade, those on both sides of trade should understand that they both benefit when trade flows.

Second, capital and labor flow of global labor force migration from one nation to another to find optimum employment opportunities is another type of economic flow. Although immigration restrictions limit such movement, it is still having a considerable economic impact (Menipaz & Menipaz, 2011). Similarly, foreign MNEs invest capital in the form of production facilities in the U.S. Likewise, U.S. MNEs do the same in other countries. In either situation, the aim is to invest where capital can be used most efficiently and profitably.

Lastly, the information and technology flow in the global economy is another type of economic flow as well. With the rapid growth in the Internet usage in present years, information flows among countries have increased drastically, for instance, from descriptions of products to investment opportunities to changes in interest rates. Whether spread online or by intangible form, technology created in the U.S. is used abroad while foreign technology is imported for consumer use in the U.S. In addition, financial flows in the global economy is from purchasing imports, procurement of foreign assets, making interest payments, and offering foreign aid; money continuously flows among nations. Thus, capital, labor, and finance flow between nations, along with products and services, technology and communication methods improvements help manage production, distribution, and marketing processes in the global economy (Frieden, 2007).

Global Trade and Dismantling Barriers

After declining in the 1930s and early 1940s, global trade has increased gradually since the end of World War II (Hooker, 2003). Continuous advancements in technology and the rapid exchange of information are fueling data-driven economies. The Internet has allowed instant communication and transmission of information. Distance, nonetheless, still an essential consideration for tangible products, does not matter when data is being traded. Sharing a file to someone on the other side of the planet does not take any more time than sending a memo to an individual in the next workspace.

Global trade has recovered and expanded after World War II, but it was not until the 1970s that global trade became vibrant (Krugman, 2013). This is because of the end of the war that made it possible, but a variety of factors such as transportation technology, communications technology, and a decline in restrictions. Centuries ago, trading with foreign countries often meant journeys lasting months, or even years. Crossing an ocean and coming back again was a long, expensive, and risky process (Hooker, 2003). Not all the ships at sea made it back. Traveling on land was no easier either. Today, large tankers can transport anything from wheat to cars across an ocean at a cost low enough that the products can be priced competitively when they arrive overseas. There

are specially designed planes that can hold large amounts and speed across great distances, making travel in hours that used to take months. The world has not become smaller or flatter, but it feels that way when things move around in a fast and efficient way (Friedman, 2007).

Not many years ago, a phone call to and another country over even another state was a significant expense. Now both voices and information are transmitted cheaply, via the Internet, traveling anywhere in any quantitate at a fraction of what it used to cost. Also, in 1940, the U.S. tacked on more than 35 percent to the cost of foreign goods coming into the country, but today the average change is several percent (Menipaz & Menipaz, 2011). Though countries still have industries and products they protect, and not all nations are open to free trade, in general, there are fewer regulations and restrictions on goods moving across borders.

Almost every country in the world participates in the global economy to some extent, and the number of participants and their level of involvement has been rising. China could become a more prominent economic powerhouse by 2050 if its growth rate continues (Hill, 2014). India could also join the ranks of the world's largest economies and most active global traders. Singapore, South Korea, and Taiwan are more examples of countries that have emerged as significant importers and exporters. Following the collapse of the Soviet Union and communist nations in Eastern Europe, nations that used to trade mostly with the Soviet Union and each other have broadened their range to Poland, Estonia, Hungary, Romania, Czech, and Slovakia (Hill, 2014).

Global economies are helped from entrepreneurship activities when innovative products are introduced that add value to consumers, whether in domestic or foreign markets. With the Soviet Union's dissolution, Estonia pursued the introduction of free-market and entrepreneurial reforms in their economy (Menipaz & Menipaz, 2011). Within a few years, it went from being a developing nation with high unemployment to rapid economic growth and hardly any unemployment (L. Yates, personal communication, January, 2015). Soon after dodging Soviet's control, they converted their economy from one ruled by the government to one determined mostly by individuals and businesses. The regulation was scaled back and simplified, and their citizens were rewarded for being entrepreneurial, and their property was protected by a robust system of laws and joined the European Union (Menipaz & Menipaz, 2011).

PROS AND CONS OF GLOBAL TRADE

Those whom presume to be injured by trade demand political protection. Taxes on imports called tariffs offer such protection to some but do so at the expense of the general public. It is reasonable to purchase products we cannot easily make on our own at home. Similarly, it makes sense to import goods made better or cheaper overseas. Even a perfect country best at creating everything within would profit from trade because it is the relative productivity and capabilities that drive trade, which economists refer to as comparative advantage (Halteman & Noell, 2012). The reason why global trade is a process that can benefit all nation is due to comparative advantage, but some nations and entities lose more than others, and not all countries benefit equally.

As more individuals in more countries participate in global trade, the scope of trade increases. More individuals in more places contribute their skills and their area's unique advantages in resources, climate, and culture (Occupytheory, 2014). For example, Chinese companies are massive producers of clothing because they have a vast supply of low-cost labor

force. Brazilian producers sell volumes of coffee around the globe since they have ample land and the optimum climate. Canadian growers export bushels of wheat by the billions because they have the endless plains to grow wheat (Hill, 2014). In each instance, companies are taking advantage of resources in areas that offer distinct comparative advantages and sources of economic power.

The most prosperous members of the global economy are where businesspersons and enterprises have opportunities to grow local resources and find comparative advantages in global trade. Coordination from well-functioning legal systems is essential to wealth production in countries whether firms have local natural resources to draw upon. Both natural resources and existing infrastructure account for approximately 20 percent of the wealth in developed countries and 40 percent in developing countries (Menipaz & Menipaz, 2011). Also, most of the wealth is derived from social institutions. People's knowledge and skills are intangible capital that constitutes over three-quarters of total wealth (Frieden, 2007).

However, comparative advantages are not forever, at least at the same degrees. The factor endowment theory states that the diversity can explain differences between countries in comparative advantage in resources they have available and make use of (Gregory & Stuart, 2013). Comparative advantages would decline or disappear over time as countries traded with each other. The reason is that a country taking advantage of an inexpensive factor that is in plentiful supply such as labor will use a lot of it which causes demand for it to go up (Gregory & Stuart, 2013). When demand goes up, the price also goes up, and that means the advantage is not so great anymore.

A developing country with millions of eager workers is going to have to employ quite a few of them before their comparative advantage evaporates (Allen, 2011). This process can be sped up if labor is being used to produce enough of a product that its price drops at the same time labor costs increase. A firm might find itself caught between the pincers of rising costs and falling revenues (Gregory & Stuart, 2013). Eventually, it may come to pass that it costs just as much for one country to produce something as the country it has profited from selling it. For instance, when China takes full advantage of its supply of labor in producing textiles, their pay will increase. At the same time, the wages of U.S. workers who have fewer work opportunities in the industry will fall. The earnings of comparable workers in both countries will not be equal, though the closer the opportunity costs of China and the U.S. in the production of apparel will move toward each other (Allen, 2011).

Is Global Trade Zero-Sum Game?

In Europe, there is a famous school of thought called mercantilism (Morrison, 2016). The mercantilists made the case that a country would become wealthier if it sold more to other countries than it bought from them. To make sure this happened, the mercantilists said that the government should regulate trade to discourage imports and encourage exports (Morrison, 2016). The mercantilists thought that when more were sold to foreigners than foreigners sold to the home country, the increased inflows of gold and silver will enrich the country and enable citizens to produce more and have more. Trade surpluses were good, and trade deficits were bad. The standard of living for the prosperous nations will rise and keep rising in the future so long as they held true to the course. However, as with many things that sound simple and good but do not work out very well, mercantilism had some problems. It was only possible to have a positive balance of trade, to sell more to others than one bought from them, for a limited period (Morrison, 2016).

When the prices of domestic items increased, competing goods offered from other countries started to look more attractive. Consumers are always searching for the best deal, and they will start to buy more foreign goods and eliminate the trade surplus.

One might ask, could not a country simply require its citizens by law to only sell their products to foreigners and not buy any in return? However, this has been attempted over and over in particular segments and industries and economies, but never worked well as planned (Morrison, 2016). First, how many other countries are going to keep tolerating the one who only wants to sell and never buy? Also, this country will keep driving its prices up for citizens and drastically reduce their options. Mercantilism rests on the notion that exchange with other countries is a zero-sum game.

However, Adam Smith explained that the world's wealth is not an amount that has to remain the same (Smith & Krueger, 2003). It could be increased, and the best way to increase it is for all nations and companies to specialize in what they do best and trade for the rest. This way, the gains from using our limited resources efficiently will benefit others involved (Smith & Krueger, 2003). From today's perspective, it seems clear that specialization increases wealth. Absolute advantage works out well in a world where each country has a superior niche, but even when there is not an absolute advantage to be had, a comparative advantage exists when one nation can create products or services at a lower opportunity cost than another.

In the real world, packed with many different nations putting out a wide variety of goods and services, is much more complicated than the simple examples of absolute and comparative advantage previously shown, but the principles still hold and are the reasons why countries, each seeking to do the best for themselves, continues to engage in global trade at steadily increasing rates (Frieden, 2007). Whatever array of absolute and comparative advantages exist at one time or place, it is not wise to assume they remain that way forever. As technology advances and innovation proceeds, new advantages are continuously emerging.

Gains from Global Trade

As advantages, opportunities, and opportunity costs continue to change, new avenues of trade are created. Though it is not easy for a country to see a former strength being whittled away by companies thousands of miles away, the process releases labor, land, capital, and entrepreneurs to search for a develop alternative projects. Despite concerns about jobs and industries being lost to foreign competitors who capitalize on sources of comparative advantage, advances in technology have a much more significant impact on the global economic landscape (Frieden, 2007). Since 2000, the U.S. has lost approximately three million manufacturing jobs (Collier, 2008). However, those jobs did not all go to China. In the same period, China lost, nearly five million manufacturing jobs (Collier, 2008). Who is responsible for the loss of all these jobs? It's not people; it's automation, robots, and more efficient assembly lines replacing human labor (Menipaz & Menipaz, 2011). Manufacturing production, the actual amount of goods made in both counties, has increased during the same period , and the reason is simply that we have become more productive and can increase output with fewer workforces than were needed in the past (Menipaz & Menipaz, 2011). Dahlin (2019) explains scholars found automation and robots have complex effects on human employment in the U.S. over 2010 to 2015. Dahlin (2019) found an increase in high-skilled human employment due to growing utilization of industrial robots. Consequently, a sizable number of researchers agree that technological advances within the U.S.

have caused much more unskilled job loss than trade with foreign countries has (Dahlin, 2019; Menipaz & Menipaz, 2011).

Tariffs, Quotas, and Global Trade

Free trade allows people and businesses to specialize in what they have their most significant advantages in and trade the resulting goods and services for things they want and need that others have the advantage in producing (Allen, 2011). This way, prosperity increases as trading partners achieve better living standards than would have been possible in isolation. Free-trade policies run into fierce resistance when businesses and workers lose pay, employment, and quality of life because competitive imported goods are selling better than their own, luring away customers and emptying the aisles of once-thriving enterprises (Allen, 2011).

First, the cost to protect a job using a tariff is usually much higher than the payment received on that job. Protecting jobs comes at a high cost (Allen, 2011). Lost jobs are spread out and hard to quantify precisely, so in theory, we cannot see people protesting about a job they hoped to get that has not been created because of tariffs. Another difficulty is that industries protected by tariffs may suffer from a loss of incentive to be creative and competitive.

Second, a limit on the amount of good that can be imported into a country during a specific period is an import quota (Allen, 2011). The amount of a restricted good allowed past the borders is less than would come in under conditions of free trade. Since supply is limited, the price for the items is higher than it would be without an import quota. As with a tariff, consumers are forced to help domestic producers stay in business.

More importantly, the World Trade Organization (WTO) outlawed quotas on imported manufactured goods while ago (Allen, 2011). Where they are used most is in the shielding of domestic agricultural markets. Quotas are tough to administer, for not only do quota administrators should decide how much of a foreign product is allowed in, but they also should decide who gets to bring in how much.

Thus, tariffs and quotas are the two faces of industry shielding taxes (Allen, 2011). A tariff raises prices without impacted production quantities, which means it is still possible for a foreign good with a tariff in the U.S. to be successful if it is equal or superior to the domestic competition even after the extra charge has been tacked on. Quotas, on the other hand, limit the amount of produced goods allowed on the market even if consumers are willing to pay more for them (Gregory & Stuart, 2013). The price keeps going up until it hits the point where those willing to pay can purchase the good and those not willing to pay more forego the product. One significant difference between tariffs and quotas is that tariffs generate revenue for the government from the higher prices consumers pay (Gregory & Stuart, 2013). Quotas, however, generate higher profits only for those fortunate enough to have permits to import goods.

Export Subsidy

Another way to help domestic producers is to lower their costs with the goal of helping them to compete and sell more goods (Bhagwati, 2007). This can be done by giving companies cash directly or taking indirect measures, such as loaning them money at low-interest rates or providing things such as insurance at a lower price than could be found otherwise. Lowering

various regulations and taxes will also assist domestic manufacturers in competing with foreign companies.

For example, a subsidy is financial assistance the government provides to companies and specific sectors of the economy intending to promote sales by keeping prices low or competitive (Allen, 2011). An export subsidy is provided to firms producing goods for export to other countries. Though a subsidy does not directly raise the cost of a good for consumers, as tariffs and quotas do, they are not free (Allen, 2011). The money should come from somewhere, and in this case, is from tax, so consumers still pay even if the route is less direct. Subsidies vary widely per the level of government involvement in the economy, and the amount of influence different industries have on government policy.

Dumping

Also, dumping happens when less money is charged for a product sold abroad than is charged in the home country (Allen, 2011). This can be an expensive habit to maintain. If the goal is to drive competition from the market, however, the opportunity to raise prices in the future might be a kind of light at the end of the tunnel. For consumers paying the lower prices, dumping is beneficial. In the U.S., the Department of Commerce reviews anti-dumping duties and as the criteria for deciding on the matter try to judge if the product is being sold below the cost of production (Hill, 2014). An anti-dumping duty is a charge imposed on a product that is considered to be priced below its cost to produce (Hill, 2014). In 2004, China slapped anti-dumping tariffs on cold-rolled steel from South Korea, Russia, Ukraine, and Kazakhstan (Hill, 2014). Chinese steel manufacturers were pleased, but how likely is it that the Chinese government had useful data on steel production costs in other countries? In 2007, Ukraine's trade commission began an anti-dumping investigation of Chinese firms for dumping steel ropes and cable on Ukraine (Hill, 2014). Moreover, U.S. steel companies have filed complaints against both Chinese and Ukrainian firms for dumping steel products in U.S. markets.

GLOBAL POLITICS AND POLICIES

Though tariffs and trade restrictions fell during the rest of the 1930s and into the 1940s, it was not until after the conclusion of World War II that this trend was formalized. It was initiated during the Bretton Woods Conference, which convened while the war was still being fought in 1944 (Hill, 2014). The overall objective of the conference was to develop a strategy for economic recovery following the war's conclusion. An essential part of this came in an approach for reducing the tariffs, quotas, subsidies, and protectionist policies in general that had done so much harm. It was called the General Agreement on Tariffs and Trade (GATT). The agreement was outlined in 1944, fleshed out in 1947 and signed by 23 countries in 1948 (Hill, 2014).

In 1994, the GATT members created the World Trade Organization (WTO) and promptly expanded the scope of the new institution (GATT ended in 1995) (Hill, 2014). From the original mandate of GATT and the responsibilities it had added during the years, WTO delved into the service sector of the global economy and even tackled the problematic issue of intellectual property rights. As membership grew and the scope of issues taken on widened, it was inevitable that disagreements would arise. Even though the WTO's mandate was to break down barriers and

promote the benefits that follow from global trade, the interests of different countries often conflicted although international trade provides general benefits, it need not benefit those not party to the trade (Hill, 2014). Domestic manufacturers and farmers are happy to purchase lower cost goods from overseas but generally, prefer their customers not have the same choice. Also, competing interests within the WTO are not enough, consider all the outside groups who have a stake in what the WTO does (Hill, 2014). An organization with so many members from all over the globe is sure to be a target of fear, suspicion, resentment, and differences of opinion.

THREATS TO GLOBAL ECONOMIC GROWTH

Equality is not the goal of globalization. The economic principle tells us that every item comes with costs, no matter how needed or valuable any objects and activities are. The course of economic globalization has created many benefits to nations around the world, but they are not free. Creating goods uses resources and create waste that should be disposed of. Sometimes development costs are steep and raise the question of whether globalization is worth the risk. The drawbacks include environmental impact, pollution, income inequality, and cultural losses and homogenization (Bhagwati, 2007).

Also, differences in the resources and abilities of individuals, firms, and countries are what makes trade beneficial. There is a fear that falling barriers of geography, technology, and politics will make the entire world to become one homogeneous marketplace where all goods, services, and incomes are similar and no matter where one goes, everything will look the same (Bhagwati, 2007).

Global Conflicts

Countries actively engaged in economic relations with each other are much less likely to be involved in violent conflicts. Countries with the least economic freedom have the most problems with violence and terrorism (Bhagwati, 2007). The opportunity cost of violence and terrorism is less where young men lack opportunities for productive work. Moreover, even when work is available, some people prefer to hold grudges. Even when most countries can find ways to get along, not every country will (Bhagwati, 2007). People may fight over differences in religion, politics, ways of life, or disputes about boundaries; violent disagreements make the peaceful trade that embodies global economic development impossible (Bhagwati, 2007). The probable result is poverty and suffering, which breeds more conflicts and encourages more ongoing negative cycle.

Income Inequality

As skills and education play a more significant role in individual career success in an increasingly information-based economy, the gap widens between what those with the advanced skills earn and what everyone else earns (Bhagwati, 2007). Also, income is just part of the wealth picture. High savings rates enable wage-earners to become capitalists, as savings compound and investment income multiply. Also, luck plays a role with investment returns, but high savings rates can transform national income as well as family income.

CONCLUSION

In the ninetieth century, more economic progress and improvements in standards of living were made than in all prior centuries combined. In the twentieth century, once again, more progress was made than in all prior centuries together (Menipaz & Menipaz, 2011). Global economic progress did not occur evenly, and there remain enormous differences between the rich and poor. Unlimited wants, coupled with limited resources available to satisfy them is the reason why we study economics. It has been in the last few hundred years that humanity could regularly meet even the basic needs of a portion of the world's population (Frieden, 2007). Though still not for everyone, the basic needs of a large proportion of the world can be satisfied. But as these basic needs for food, shelter, and clothing are satisfied for more of the world's population, their attention turns to other goods from electricity to televisions and cars and more. Always wanting things to be better and never being satisfied with the way things are has been and will continue to be a driving force for incredible progress in our globalized economy.

The effectiveness of progress is contingent upon the alignment of three globalization forces: economic forces, political forces, and technology forces (Martinelli, Rahschulte, & Waddell, 2009). Economic forces are the "driver" of globalization expansion, collaboration, and inclusion. It's these forces that fuel the quest entrepreneurs and global leaders have to find new markets, better suppliers and distributors for their of products, and create an advantage over competition. Political forces are the "enablers" of globalization. The realization of global expansion, collaboration, and inclusion is guided by political actions of the world's most powerful nations. Therefore, political forces open or close, expand or constrict market opportunities for entrepreneur and others seeking global integration. While economics drives globalization and politics enable globalization, it is technology that serves as an "accelerator" of globalization. In other words, "the speed of globalization is dependent upon the conditions for technological use and advancement of technology development" (Martinelli, Rahschulte, & Waddell, 2009, p. 21). The basis of technology as an accelerator to globalization is in its ability to reach or scale access, facilitate interaction and collaboration, and to enhance the ease of transactions and exchanges of good and services across borders.

As noted by Martinelli, Rahschulte, and Waddell (2009), "Although it helps to look at each of the three primary forces of globalization separately to better understand their influence on globalization, the forces themselves do not operate independently. It is the interaction of economic, political, and technological forces that has historically had the most dramatic influence on globalization" (p. 22-23). Over the years, advancement has been made possible because of alignment with global economic, political, and technological forces. There have been periods of time, however, when such advancement was constrained due to conflicting, or misalignment, positions regarding these forces. To address basic needs alignment is needed.

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ARE WE HAVING FUN YET?:
WHAT IS THE RELATIONSHIP BETWEEN EMPLOYEE JOB SATISFACTION,
MENTORING, AND FUN AT WORK?

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ABSTRACT

Contrary to that popular saying, over 70% of all employees are dissatisfied with their jobs (Crabtree, 2013). That dissonance causes a lack of productivity (Bates, 2004; Gallagher & Einhorn, 1976; Saks & Gruman, 2014); poor workplace safety (Liao, 2004; Lutchman, Maharaj, & Ghanem, 2012); and lack of personal esteem (Herzberg, 1968) to name a few. The underlying reason is that they are not having any fun! (Crabtree, 2013). A fun atmosphere is accomplished only when management is having fun (Becker, 2012). The thinking is that if management is having fun at work, then employees will have more fun. This study reveals that Employees who view Managers as Role Models have a high degree of Job Satisfaction. Those Employees also believe that a Manager that acts Selflessly increases their Job Satisfaction. Both are positively mediated when the Manager is having fun.

INTRODUCTION

Having Fun at Work has become rarer and rarer in today's workplace, mostly due to the high expectations placed on management to produce profits as the primary reason (Head, 2003). Those expectations, and the stress they create, make managers more demanding and less forgiving (Head, 2003), and leads to an unhealthy relationship between manager and employee (Chi, Chung, & Tsai, 2011). This rift makes employees less willing to contribute and reduces productivity, creates an unsafe workplace (Liao, 2004), and leads to a lack of personal esteem (Gagne, 2005). This type of management can be paralyzing in the long-term (Chi et al., 2011). Therefore, if Managers were to have Fun at Work, one would hope that their Employees would also have fun (Chi et al., 2011).

It is well known that a manager's mood dictates the amount of fun their staff/team/employees have at work (Chi et al., 2011). The notion is that, if the manager is having fun, then the employees will have fun, too (Chi et al., 2011). Research also shows that employees who have fun at work, are more satisfied with their jobs (Becker, 2012; Herzberg, 1968).

Additionally, the increases in fun for the employees will increase the amount of fun for the managers, in a kind of give-and-take feedback loop (Bolton, Houlihan, Bolton, & Houlihan, 2009).

This qualitative study (Scardillo, 2018)—discovered several important factors that contributed to fun in the workplace. The most significant was mentoring. Many of the employees who were interviewed spoke of qualities such as a manager's selflessness, the structure and balance they provided, and how setting good examples made them role models (Scardillo, 2018). A review of the subject also revealed that there is very little research about fun at work – most of the research focuses on happiness or playfulness. This is due to a lack of research that defines fun at work (Ford, McLaughlin, & Newstrom, 2003a).

Based on the previous discussion the following research question emerges: What is the relationship among employee job satisfaction, mentoring, and fun at work?

Although there is a great deal of literature written about the impact of mentoring on the protégé, there is little written about the impact of mentoring on the mentor or the manager. This is confirmed by many authors (Bolton et al., 2009; Boyatzis, Richard, 2012; Ford et al., 2003a; Kinjerski & Skrypnek, 2006). Each writes that there is a plethora of research regarding the outcomes of the "mentees" – protégés but that there is a lack of knowledge regarding the outcomes on the mentors.

LITERATURE REVIEW

Fun at Work

The corporate world has numerous publications regarding the advantages (and disadvantages) of having fun at work, yet nowhere is there a clear definition. The Merriman-Webster Dictionary defines "Fun" as something that "*provides enjoyment; an enjoyable experience or person; a good time*" (*Fun (definition)*, 2015), and there are numerous articles in *Forbes*, *The New York Times* and *Time* magazine about fun at work, but there is very little to define and quantify the term in Academia.

Probably the most widely used definition is by authors Ford, McLaughlin and Newstrom, who viewed the topic through the eyes of human resource managers (Ford, McLaughlin, & Newstrom, 2003b). They discovered that HR managers evaluate various programs to determine what is most effective in promoting a fun work environment. Their findings concluded that a fun environment "*encourages, initiates, and supports a variety of enjoyable and pleasurable activities that positively impact the attitude and productivity of individuals and groups*" (Ford et al., 2003b) The factors used to create this environment varied, but provided the employees with a sense of positive well-being, and moved them beyond the "satisfied" with their job stage to "having fun" stage (Ford et al., 2003b).

Bolton's et al. work suggests that fun at work provides employees with an enhanced quality of work-life, reputation, performance, communication and group cohesiveness (Bolton, Houlihan, & Renee Baptiste, 2009). They note that fun is the extent to which a person perceives the existence of fun in their workplace, and that a fun environment demonstrates a higher level of caring, and gives a company a competitive advantage over other, less fun firms with regards to recruiting personnel (Bolton et al., 2009). This is the basis for this research's definition of fun at work.

Mentoring

What is often studied about Mentoring is the outcome for the protégé. Very little is dedicated to the effects of mentoring on the Mentor. Stenfors-Hayes' study focused on this notion. That study discovered that the second-most popular reason why mentors liked mentoring was it "*related to being fun*" (Stenfors-Hayes et al., 2010). This was behind rewarding terms such as "stimulating" or "developing", and was overwhelmingly popular amongst all her respondents (Stenfors-Hayes et al., 2010). She wrote "(Mentors) *appreciated feeling important and needed*" (Stenfors-Hayes et al., 2010).

Cheryl Wright notes that mentors express the great pride they realize in their protégé's accomplishments (Wright & Wright, 1987). She also wrote that the mentors feel a sense of immortality, as if they are passing on their knowledge, creating a lasting contribution to the workplace (Wright & Wright, 1987). Ragins and Scandura agree with Wright and found that mentors feel a great sense of satisfaction and fulfillment from being a mentor, especially when the protégé is a young adult (Ragins & Scandura, 1999). In addition, Seligman and Achor that fulfilling and meaningful work leads to happy employees (Achor, 2011; Seligman, 2004). The belief is that executives who mentor will increase their own personal happiness, which will affect other employees' job satisfaction (Chi et al., 2011).

This discovery was further supported by Chi, Chung and Tsai, who found that "*the relationship between leader's positive moods and team performance*" (Chi et al., 2011) directly enhanced employee performance and led to more cohesive team structures. They further discovered that this positive mood affected group "tone" and the amount of team socialization, productivity, and job satisfaction (Chi et al., 2011). Thompson wrote that a leader who is caring and involved is the "*the critical ingredient*" (Thompson, 1996a) in successful organizations. He found that the manager's ability to communicate was instrumental in the success of both the employee and the company (Thompson, 1996a).

Boyatzis wrote that leaders "*use their emotional intelligence to build shared hope, compassion and mindfulness*" (Boyatzis & Richard, 2012) in their relationships with employees. The authors propose a model of "coaching" in which the "coach", or manager, establishes a

trusting relationship with the "coachee" (or employee) and freely discuss their hopes and dreams. This evokes a sense of caring and compassion, and creates an organization open to new ideas and possibilities (Boyatzis, Richard, Smith, & Beveridge, 2012). All of this is applicable to our findings and overwhelmingly supports each of our hypotheses.

Job Satisfaction

There are numerous factors that contribute to an employee's level of job satisfaction, but Herzberg's Motivation-Hygiene Theory identifies the leading factors (Herzberg, 1968). These include incentives that are motivation-based, such as responsibility, the nature of the work, achievements, and personal worth. These all increase an employee's job satisfaction. Among the factors he proposed that would increase job satisfaction was for managers to provide encouragement to employees when beginning new tasks (Herzberg, 1968). This, in part relates to the effect a Role Model plays in the development of the protégé.

On the other hand, Herzberg discovered that "hygiene" factors – job security, salary, work conditions – do not provide positive job satisfaction (Herzberg, 1968).

Hypotheses Development

study introduces four hypotheses to further study the effects of manager selflessness, manager as a role model, and the effect fun at work has on Employee Job Satisfaction.

The Effect of Manager as Role Model on Employees' Job Satisfaction
A role model is someone who is looked up to and respected by others, and serves as an example to be imitated. Having the right role model is not only vital to one's career advancement, but also provides the employee with the satisfaction that they are doing the right thing. Gibson (Gibson, 2004) writes that the traditional Role Model provides an example for someone to imitate, such as a teacher, supervisor or parent.

H1: Manager as a role model has a direct, positive effect on employee job satisfaction.

The Effect of Manager Selflessness on an Employee's Job Satisfaction
Generally speaking, a selfless person is someone who is more concerned about the well-being of others than of themselves. Sadly, today's business world is made up of too many managers and employees who are only interested in one thing: "What's-In-It-For-Me?" (Garvey, 1997).
Having a manager that is selfless is so important for an employee's Job Satisfaction. They are willing to give freely of their own time to help employees; show genuine concern about that person's future; and provide support and counsel in difficult situations. In short, they "have your back." Given the previously discussed circumstances, the following hypothesis can be advanced:

H2: Manager selflessness has a direct positive effect on employee job satisfaction.

The Effect of Fun on the relationship between Manager Role Model and Employee's Job Satisfaction
Managers must perform impossible tasks. They are assigned difficult sales or production quotas, required to fulfill them with sometimes few employees that lack the experience, and yet

they improve product quality and service. All the while, they must "look over their shoulder" at the possibility of being fired for not accomplishing these duties. By themselves each could be viewed as a job challenge but, when lumped together, they become stressors, not challenges. This is a situation that leads to less job satisfaction for the manager – and the employees (Anitha, 2014b).

Managing employees is a large part of a manager's duties. The caring, selfless leader is the "critical ingredient" (Chi et al., 2011; Thompson, 1996b) for employees to have fun at work. This will improve employee job satisfaction, which will lead to a further increase in the manager's willingness to serve as a role model for their staff, which (again) provides the employees with more job satisfaction. Thus, the following hypothesis can be created:

> H3: Fun mediates the positive effect between manager role model and employee job satisfaction.

The Effect of Fun on the relationship between Manager Selflessness and Employee Job Satisfaction.

Managers are more willing to devote time and energy to employees if they are enjoying their work. This creates a positive synergy that further increases the manager's willingness to assist his employees in any way that he can. The more he contributes to their well-being, the more inclined they will be to be satisfied with their job. These thoughts lead to the following hypothesis:

> H4: Employees having Fun mediates the positive effect between Manager Selflessness and Employee Job Satisfaction.

Methods

We used a quantitative study to understand the impact of manager as a role model, manager's selflessness (and their relationship to fun) on employee job satisfaction.

Measures

Participants were asked a series of questions related to Employee Job Satisfaction, Fun at Work, the importance of having a manager that serves as a role model, and having a manager that exhibits a high degree of selflessness. All these scales were deemed reflective. The specific questions can be found in the Appendix.

Job Satisfaction

This study used Abu-Shamma (Abu-Shamaa, Al-Rabayah, & Khasawneh, 2015) to measure Employee Job Satisfaction. *This includes: There is someone at work who encourages my development*; *At work, my opinions seem to count*; *I am proud to tell others that I am a part of this organization*; *I really care about the fate of this organization.*

Role Model

This research used Viator & Scandura (1991) scale of the effect a Role Model has on an Employee's Job Satisfaction: The scale used items such as "*I try to model my behavior after my mentor*"; "*I admire mentor's ability to motivate others*"; "*I respect mentor's knowledge of the accounting profession*"; "*I respect mentor's ability to teach others*"; *I share personal problems with mentor*. Each of these items was adapted for our survey.

Manager Selflessness

This study used Fluegge along with Cook & Wall (1980) and Williams, Scandura and Gavin (2009) to examine the impact of manager selflessness on employee job satisfaction. Their items include (Cook & Wall, 1980; Fluegge, 2008; Williams, Scandura, & Gavin, 2009): *Willingly gives his/her time to help others who have work-related problems*; *Shows genuine concern and courtesy toward coworkers*, *even under the most trying business or personal situations*; *Our team leader takes a personal interest in each of our careers*; *Our team leader gives us special coaching on the job*.

Fun at Work

This investigation employed Ford, McLaughlin and Newsome (2003a)measures that include items that led to a Fun work environment: *Companies that promote Fun at Work are more effective that companies that don't*; Opportunities for Personal Development.

Fluegge also examines fun in the workplace and provides the following items (Fluegge, 2008): *This is a Fun place to work*; *My direct supervisor seems to value Fun*; *My company has a Fun atmosphere*; *Most people here have Fun at work*; *The overall climate of my company is Fun*; *My supervisor encourages Fun at Work*.

Job Satisfaction for Employee

The measures used to measure job satisfaction for employees was derived from (Harter, Schmidt, & Hayes, 2002) Harter, et al and employed a 5-point Likert Scale (1 = very slightly or not at all, 2 = a little, 3 = moderately, 4 = quite a bit, and 5 = very much). The following questions are included: (Employee): "*There is someone at work who encourages my development*.

Manager as a Role Model

The Manager as Role Model section employed a 5-point Likert Scale (1=Strongly Disagree; 5=Strongly Agree) (Viator & Scandura, 1991) and ask such questions as: "*I try to model my behavior after my Mentor*"; "*I share personal problems with my Mentor*"; and "*I respect my manager's knowledge*".

Manager's Selflessness

The measures for manager's selflessness center around a Manager's ability to be more concerned with the well-being of others than himself. Fluegge, Cook & Wall (2008) use a 5-Point Likert Scale (1=Strongly Disagree; 5=Strongly Agree) to measure such questions as "*Manager willingly gives his/her time to help others who have work-related problems*"; "*Manager shows genuine concern and courtesy toward coworkers, even under the most trying business or personal situations*"; "*Manager gives up time to help others who have work or non-work problems*".

Fun at Work

McDowell's (McDowell, 2004) fun at work scale was used to measure this mediator using a Likert 5-Point scale (1=Never; 5=Almost Always). Participants were asked questions such as "*This is a Fun place to work*"; "*My direct supervisor seems to value Fun*"; "*The overall climate of my company is Fun*".

Demographic information such as age and gender were captured with this data as well.

Instrument Development

Following the guidelines of Thomas and Watson (2002) we validated the discriminant and convergent validity of the scales using a Q-Sort technique. Q-sort is a well-established technique for evaluating these responses, and helps the researchers understand the amount of convergent and discriminant validity provided by the data.

The questionnaire was pre-tested using Qualtrics Survey Software. The pre-tests were sent to a total of 17 people in the researcher's professional network. This group included former and current managers and employees and was a relatively equal cross-section of old/young and male/female. After the first test was completed, several minor word changes were made (past tense changed to present tense). The second test required no further modifications, therefore the survey was distributed.

Sample

Data was collected between July 2016 and November 2016 from individuals in the advertising, marketing and sales industry located predominantly in the Albany Capital region, New York. A total of 593 people were contacted and 338 people responded to the survey for a 57% response rate. The responses were then split into managers (103) and employees (228). The sample was obtained through members of the author's network of professional contacts. Participants were solicited through e-mails, which invited them to participate in the on-line survey. The individuals were given a 24-hour window of opportunity to complete the survey which eliminated the problem of non-response bias.

From the 338 responses, a total of 26 records (17 Employees; 9 Managers) were deleted because of missing data (Hair, 2010) for a sample size of 312 records. This was broken down to 211 employees and 94 managers. A breakdown of the characteristics of the sample is below in Table 1. Overall, the demographics of the sample were sufficient, although there was a high number of 18 to 25 year-old employees (119). We had also hoped for a higher number of female managers. This screened sample was kept separated in~~to their~~ its respective categories for the Measurement Model Analysis (below).

Table 1: Sample Demographics

	Employee		Manager
Sample Size	228		103
Usable Data	211		94
Gender			
Male	101		68
Female	110		26
Age			
18-25	119		6
26-35	27		10
36-45	12		16
46-55	19		21
Over 55	34		41
Had a Mentor?		**Been a Mentor?**	
Yes	138	**Yes**	86
No	73	**No**	8
Structure Program	40		21
Unstructured Program	124		73

Measurement Model Analysis

The study employed both an Exploratory Factor Analysis (EFA) and a Confirmatory Factor Analysis (CFA) on the trimmed and screened datasets using Version 24 of IBM SPSS and Amos Graphics software. The EFA was conducted in SPSS using both Principal Axis Factoring and Maximum Likelihood with Promax Rotation. Eigenvalues were set at the greater than one (01) setting.

EFA with Employee Dataset

The EFA required very little adjustment. After several iterations that included deleting several of the items, we arrived at an acceptable version. In the final version, the communalities ranged from .148 to .920 with only FUN2 (.148) and EJobSat7 (.447) falling below the acceptable threshold of .5 (Hair, 2010). Kaiser-Meyer-Olin Measure of Sampling Adequacy (KMO) value was .934; The Bartlett's Test of Sphericity was significant (Chi-Square = 3435.400; d/f = 210; P-value = .000), indicating sufficient inter-correlations. In the Pattern Matrix, all items measured above .500 except FUN2. Cross-loadings were apparent on EJobSat4, EJobSat5, Role1and Self5, but the difference to the primary factor was greater than 0.2 (Hair, 2010). Cronbach Alphas were also measure for each factor, each calculated well above the .70 threshold (Hair, 2010).

Table 2: Cronbach's Alpha for Employee Dataset

Reliability Statistics	Chronbach's Alpha	N of Items
FUN	.858	6
EmpJobSat	.858	5
RoleModel	.929	3
Self	.942	7

CFA with Employee Dataset

`The CFA for the Employees was conducted using AMOS Graphics, with the dataset being imported from SPSS. Prior to any calculations, the study noted the values for the Modification Indices and co-varied error terms for items that loaded on the same factors (Self1 to Self6) (Hair, 2010). A rough Model Fit measurement was conducted, which passed on all values (below) CMIN = 325.368; DF = 182; CMIN/DF = 1.788; CFI = .957; SRMR = .047; RMSEA = .063; PClose = .029. The study noted that while both RMSEA and PClose do not fall within the thresholds, they are both acceptable values based on the sample size (Hair, 2010).

Then a full reliability and validity check was performed to determine the presence of convergent validity and discriminant validity. Numerous issues with the discriminant validity on the initial pass were discovered. Numerous iterations were attempted, among them removing the low-loading items and/or co-varying items. Still, very high numbers for the relationships between EJobSat and FUN (.83), RoleModel and Self (.81) were observed. Therefore, a version removing the relationship between EJobSat and FUN (the highest value) was attempted. This was the only iteration that provided satisfactory results (see below).

Table 3: CFA for Employee Dataset (Reliability & Validity Tests)

|	CR	AVE	MSV	MaxR(H)	Fulfill	JoT	ManJobSat	FUN
EJobSat	0.878	0.644	0.305	0.884	0.803			
SELF	0.935	0.675	0.624	0.960	0.552	0.822		
FUN	0.888	0.583	0.035	0.977		0.188	0.764	
Role	0.926	0.806	0.624	0.983	0.487	0.790	0.154	0.898
Overall Model	Chi-Square		Df		P-Value		Invariant?	
Unconstrained	69.1		55					

Fully Constrained	104.8	69		
Number of Groups		2		

The common method bias test compared the unconstrained Common Method Factor Model to the fully-constrained (0 constrained) Common Method Factor Model. The Chi-square test came out significant, indicating a great deal of shared variance. Several iterations were attempted, including moving the constraints, but none of these improved the values. It was concluded that the research found the Common Method Bias corrected measures. This model was used moving forward.

Structural Equation Model (SEM)

SEM is a statistical analysis technique that is used to analyze the relationships between constructs. This approach is used in applications where the researchers are assessing the direct and indirect effects between variables (Hair, 2010).

Figure 1: Employee Model
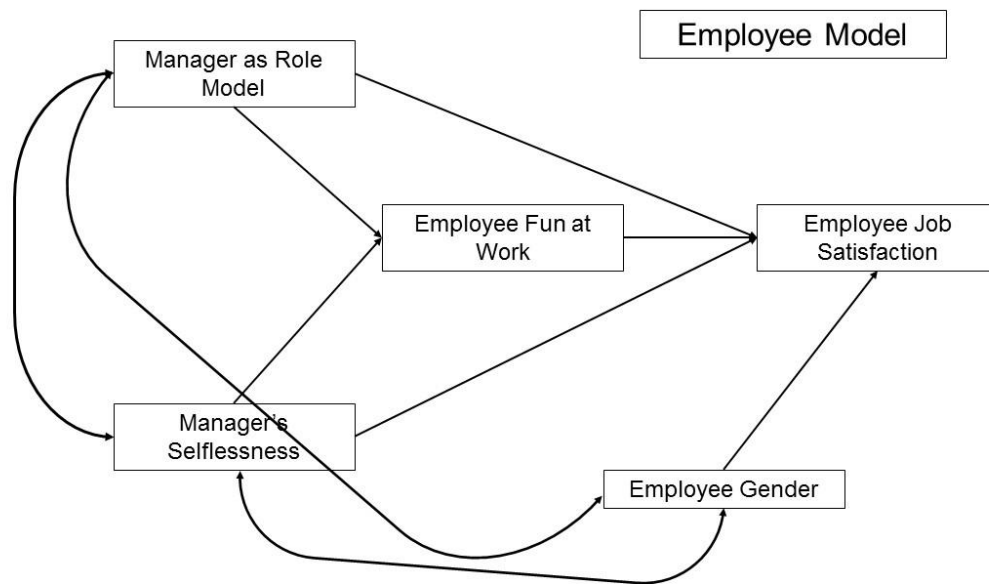
SEM Employee Dataset

Using AMOS, the Employee dataset was imported ~~imputed~~ and Model Fit Test performed. The following values were observed: CMIN = 2.916; DF = 1; CMIN/DF = 2.916; CFI = .996; SRMR = .036; RMSEA = .098; PClose = .166. Several iterations were tried in order to achieve Model Fit, but none were successful until the relationship between RoleModel and Fun was

removed. This provided the following (excellent) results: CMIN = 3.245; DF = 2; CMIN/DF = 1.623; CFI = .998; SRMR = .037; RMSEA = .056; PClose = .348. Also, good R-Squared values for both EJobSat (.674) and Fun (.301) emerged (Hair, 2010).

A Cook's distance analysis to determine if there were any outliers was conducted, and observed four records in which the outliers are significantly higher than the others. Records 94, 104, 123 and 2 were higher than all the others and were deleted from the dataset. This will strengthen the regression. All other records exhibited normal Cook's distances well below the .1 threshold (Hair, 2010) (Please refer to the Appendix for details).

Multicollinearity was examined to observe the relationship between the independent variables to see if they correlate to each other (Hair, 2010). The threshold for the Variance Inflation Factor VIF), is 3 and the threshold for Tolerance is .1 (Hair, 2010). Furthermore, it was detected that the RoleModel and SELF have high VIFs (over 3.0), meaning they are overlapping in the portion of variance they explain. The only option would be to drop one of them. But, because the Tolerance levels are all within nominal ranges (above .1), the data was kept (Hair, 2010).

Testing for Mediation with Employee Dataset (AMOS)

All of our hypotheses were tested using CMB-Corrected/Adjusted Variables and the AMOS AxB Estimand feature, which allows us to name two (02) parameters and create an indirect path. AxB Estimand is an easy-to-use plug-in feature for AMOS, which allows the user to estimate any of the functions especially when there are multiple paths from the same Independent Variable to the same Dependent Variable. It includes confidence intervals and significance tests, and meets the needs of most researchers (Arbuckle, 2010). Also, the Bootstrap function was selected with 2000 samples and 90% Bias-Correlated. Bootstrapping is used when sample sizes are too small to estimate their significance with any degree of power (Hair, 2010).

The mediation was tested for the comparison of a direct effect between the Independent Variable and the Dependent Variable while including an indirect effect through a mediator (Hair, 2010). The results for both direct and indirect approaches are below in the "Results" section.

RESULTS

Table 4: Results of Hypotheses

Hypothesis Summary Table		
Direct Effect (Employee Dataset)	**Evidence**	**Supported?**
H1: Manager as a Role Model has a direct, positive effect on Employee Job Satisfaction.	Beta = 0.608 P-Value = ***	Yes
H2: Manager Selflessness has a direct positive effect on Employee Job Satisfaction.	Beta = 0.681 P-Value = ***	Yes
Mediation (Employee Dataset)	**Evidence**	**Supported?**
H3: Fun mediates the positive effect between Role Model and Employee Job Satisfaction.	Direct = 0.608 P-Value = *** Indirect = 0.319	Yes

	P-Value = ***	
H4: Fun positively mediates the effect of Manager Selflessness on Employee Job Satisfaction.	Direct = 0.681 P-Value = *** Indirect = 0.384 P-Value = ***	Yes

Hypothesis 1: Yes, Managers who serve as Role Models have a direct, positive effect on Employee Job Satisfaction.
Hypothesis 2: Yes, A Manager who acts Selflessly does have a direct positive effect on Employee Job Satisfaction.
Hypothesis 3: Yes, Fun does mediate the positive effect between Managers who serve as Role Models and Employee Job Satisfaction.
Hypothesis 4: Yes, Fun does positively mediate the effect of a Selfless Manager on Employee Job Satisfaction.
We also noted at this point that Gender has no influence on both Employee Job Satisfaction and Manager Job Satisfaction.

Figure 2: Employee Fun at Work Final Structural Model
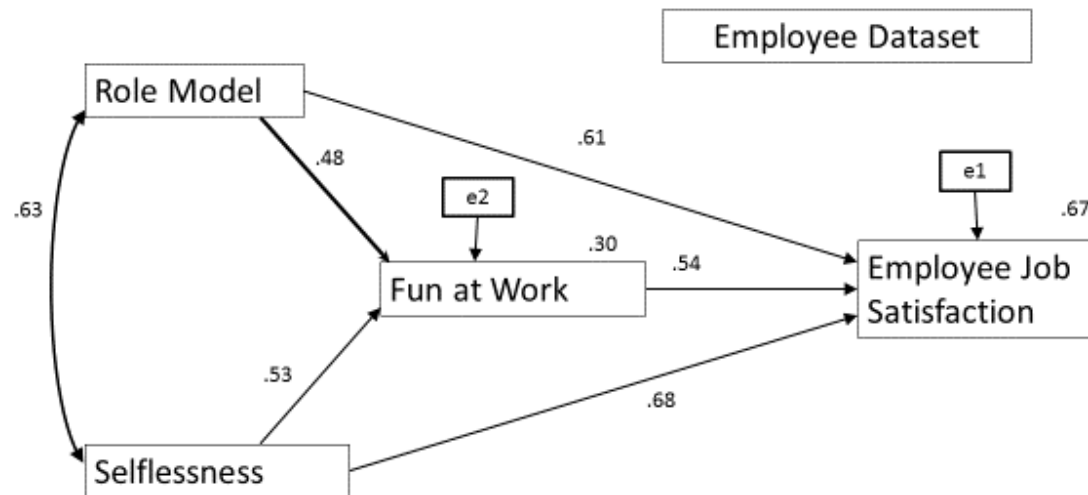
DISCUSSION

There were a number of useful findings in this data. All the hypotheses were validated, and there were strong, positive results for all factors and relationships. Employees have an extremely high degree of Job Satisfaction when the Manager is a Role Model (61%). Employees pay a great deal of attention to everything their manager does – both good and bad. A Role Model is someone

who is looked up to and respected by others and serves as an example to be imitated. They need to live up to this expectation and act appropriately. Having the right Role Model provides the employee with the satisfaction that they are doing the right thing. Remember, Role Models, such as teachers, coaches, supervisors of parents, provide an example for someone to imitate (Gibson, 2004).

The research also discovered that a manager who acts Selflessly does have a direct positive effect on Employee Job Satisfaction. Having a manager that has his employees' well-being at the forefront of his mind has a profound effect on the Employees' Job Satisfaction. Unfortunately, many of today's managers are only focused on their personal career and disregard this important factor (Garvey, 1997).

The mediated hypotheses was validated – the positive effect fun. In Hypothesis 3 it was discovered that fun positively mediates the relationship between Manager Role Model and Employee Job Satisfaction – a manager that is having fun while being a role model greatly increases an employee's Job Satisfaction. This is especially important for managers to understand because they are under so much pressure to improve quality and quantity with dwindling resources. Keeping fun in the equation will ultimately make their job less stressful (Anitha, 2014a; Head, 2003). Furthermore, part of being a Role Model includes demonstrating selflessness for their employees. In the qualitative study, many of the managers spoke of the great joy and fulfillment they derived from acting selflessly (Scardillo, 2018). By just doing these simple things, their fun increased, improving the same outcome for the employees.

Along that line of thinking, the research unearthed that Managers are more willing to devote time and energy to employees if they are enjoying their work. This creates a positive synergy that further increases the manager's willingness to assist his employees in any way that he can. The more he contributes to their well-being, the more inclined they will be to be satisfied with their job (Anitha, 2014a; Head, 2003).

Lastly – and of great importance – these findings help define the term "Fun at Work". Little has been written in academia about "Fun at Work", whereas a great deal of research has been devoted to the other topics (Ford et al., 2003b).

Limitations

One of the key reasons why the advertising, marketing and sales industry were selected for this study was their naturally creative, independent and innovative approach to conducting business. While this brought great insight into the findings, other industries – such as manufacturing – may not be influenced by this approach. The research was also confined to the Greater Albany, NY/Capital Region market. While ranked 52nd in market size, future research should include other/larger markets. The low number of responses (103) to the Manager's survey is a challenge.

Future Research

This study provided several key findings about the relationship between Fun at Work, Manager Job Satisfaction and Employee Job Satisfaction.

What needs to be done next is a study on what is "not fun" in the workplace. The qualitative study indicated several factors that contributed to this – new ownership, new managers being among the top factors - but further work needs to be developed in order to create a meaningful body of data. Although not part of this study, it also captured data on the type of Mentorship program implemented by a company – an organic/unstructured program where the Mentor and Protégé begin a spontaneous relationship that progresses with very little oversight, or a more structured/formal program that has guidelines and oversight. It is suggested that an organic mentorship program – one that develops informally and mutually – has more impact on the amount of Fun a manager has than a more structured/formal mentorship.

Lastly, consideration needs to be given to a uniform method to define and assess fun it is hoped that this search will spawn an academic body of knowledge on this important topic.

APPENDIX

Table A1: Academic Literature/Scales for Measurement

Construct/Dimension	Definition	Items	Source
Manager as Role Model	A person looked to by others as an example to be imitated	Viator & Scandura, 1991 Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree 1 2 3 4 5 I try to model my behavior after mentor. I admire mentor's ability to motivate others. I respect mentor's knowledge of the accounting profession. I respect mentor's ability to teach others. I share personal problems with mentor. I exchange confidences with mentor.	(Viator & Scandura, 1991) The Chi-square statistical probability indicates that the odds are less than 1 out of 10,000 that the percentage of employees with a mentor is the same for all employee organizational levels (manager, senior, and junior).
Manager's Selflessness	Being more concerned with the well-being of others	Fluegge, 2008 Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree 1 2 3 4 5 Willingly gives his/her time to help others who have work-related problems Shows genuine concern and courtesy toward coworkers, even under the most trying business or personal situations Gives up time to help others who have work or nonwork problems Assists others with their duties Keeps up with the developments Cook & Wall, 1980 Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree 1 2 3 4 5 Management at my firm is sincere in its attempts to meet the workers' point of view.	(Cook & Wall, 1980; Fluegge, 2008; Williams et al., 2009) Fluegge: Internal consistency reliability analysis revealed an alpha of = .91 indicating adequate reliability for this shortened measure of organizational citizenship behaviors.

		Williams, Scandura & Gavin, 2009 Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree 1 2 3 4 5 Our team leader takes a personal interest in each of our careers. Our team leader gives us special coaching on the job. Our team leader helps us coordinate professional goals. Our team leader has devoted special time and consideration to our careers.	
Personal Fulfillment for Manager	Achievement of life goals which are important to the manager	Fluegge, 2008 Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree 1 2 3 4 5 I find the work that I do full of meaning and purpose	(Fluegge, 2008) Internal reliability analysis revealed a coefficient alpha of = .93 for positive affect.
Great Pride for Manager	The deep satisfaction associated with a particular achievement	Fluegge, 2008 Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree 1 2 3 4 5 I am proud of the work that I do Cook & Wall, 1980 Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree 1 2 3 4 5 I am quite proud to be able to tell people who it is I work for.	(Cook & Wall, 1980; Fluegge, 2008)
FUN	Something that is enjoyable	Fluegge, 2008 Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree 1 2 3 4 5 1. This is a fun place to work 2. My direct supervisor seems to value fun 3. My company has a fun atmosphere 4. Most people here have fun at work	(Fluegge, 2008; Ford et al., 2003a)

		5. The overall climate of my company is fun 6. My supervisor encourages fun at work Ford, McLaughlin, 2003 Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree 1 2 3 4 5 Companies that promote fun at work are more effective than companies that don't.	
Employee Job Satisfaction	'the extent to which a worker feels positively or negatively about his or her job'	Abu-Shamaa, etal 2015 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree There is someone at work who encourages my development. At work, my opinions seem to count.	(Abu-Shamaa et al., 2015) C-Alpha 0.7016
Manager Job Satisfaction	'the extent to which A manager feels positively or negatively about his or her job'	Abu-Shamaa, etal 2015 C-Alpha 0.7016 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree I fully support my company's goals and objectives. I am proud to tell others that I am a part of this organization. I really care about the fate of this organization.	(Abu-Shamaa et al., 2015) C-Alpha 0.7016

Table A2: Q-Sort Results

Q-Sort Results	Employee	Manager	OVERALL	Total
FUN				
My company is a fun place to work.	76.00%	93%	85%	
I believe employees should have fun at work	100.00%	67%	84%	
Overall, this company has a fun work environment	84.00%	67%	76%	
Most people here have fun at work	85.00%	94%	90%	
I have fun at work	100.00%	67%	84%	
Our company promotes having fun at work.	100.00%	89%	95%	
My manager encourages me to have fun at work	60%		60%	

My company has a fun atmosphere	68.00%	73%	71%	
The overall climate of my company is fun	61.00%	83%	72%	
My Staff/Boss Encourages me to have FUN at work	80.00%	80%	80%	
The overall climate of my company is fun	100.00%	100%	100%	
				81%
Job Satisfaction				
Considering everything, I am satisfied with my job.	83%	76%	80%	
Considering everything, I am satisfied with my work group.	75%	83%	79%	
My job is so satisfying, I look forward to going to work every morning.	84%	72%	78%	
My job is satisfying because my personal values match my company's values.	88%	72%	80%	
My job is so satisfying, that I tell my friends this is a great place to work.	81%	64%	73%	
I am satisfied by the work that I do.	75%	64%	70%	
My job satisfaction is positively affected by my manager/employees.	100.00%	88%	94%	
I feel happy when I am working intensely.	100.00%	66%	83%	
I am proud of the work that I do.	100.00%	85%	93%	
I would accept almost any type of job assignment in order to keep working for this organization	100.00%	n/a	100%	
Mentoring has a positive effect on my job satisfaction	n/a	50%	50%	
				80%
Role Model (Employee Only)				
I try to model my behavior after my manager.	90%			
I admire my manager's ability to motivate others.	84%			
My Manager represents who I want to be.	100.00%			
I admire my manager's ability to teach others.	80%			
My manager serves as a Role Model for me.	100.00%			
I respect my manager's professional knowledge.	79%			
				89%
Selflessness (Employee Only)				
My manager willingly gives his/her time to help others who have work-related problems	100.00%			
My manager takes time to serve as a sounding board for me to develop	100.00%			
My manager helps me achieve my professional goals.	100.00%			
My manager has devoted special time and consideration to support our careers.	78%			
My manager protects me from those who may be out to get me.	100.00%			

My manager shows genuine concern and courtesy toward coworkers, even under the most trying business or personal situations.	67%			
My manager assists others with their duties	93.00%			
My manager takes a personal interest in each of our careers.	93.00%			
My manager helps us coordinate professional goals.	79.00%			
				90.00%
Personal Fulfillment (Manager Only)				
Mentoring gives me a sense of personal fulfillment by passing on my wisdom to others.		66%		
I have found personal purpose and fulfillment through mentoring.		78%		
I find meaning and purpose through mentoring.		75%		
I find the work that I do full of meaning and purpose		100%		
I am able to relive my career through the protégé		100%		
				84%
Joy of Training (Manager Only)				
Training and developing a junior employee is rewarding to me		77%		
Training employees affords me reciprocal learning opportunities.		83%		
It's gratifying to watch employees learn and develop.		78%		
I am able to relive my career by training my protege		50%		
I like to train the employee to resolve their own issues and doubts		90%		
Identifying and nurturing managerial potential is rewarding to me.		60%		
				73%
				83%

Table A3: EFA for Employee Dataset

EFA

Pattern Matrix[a]

|	Factor			
	1	2	3	4
FUN1		.939		
FUN2		.402		
FUN3		.851		
FUN4		.769		
FUN5		.656		
FUN6		.737		
EJobSat1			.676	
EJobSat3			.888	
EJobSat4	.242		.668	
EJobSat5		.304	.589	
EJobSat7			.524	
Role1	.250			.641
Role3				.841
Role5	.252			.755
Self1	.942			
Self2	.943			
Self3	.806			
Self4	.845			
Self5	.615			.206
Self6	.730			
Self7	.828			

Extraction Method: Maximum Likelihood.
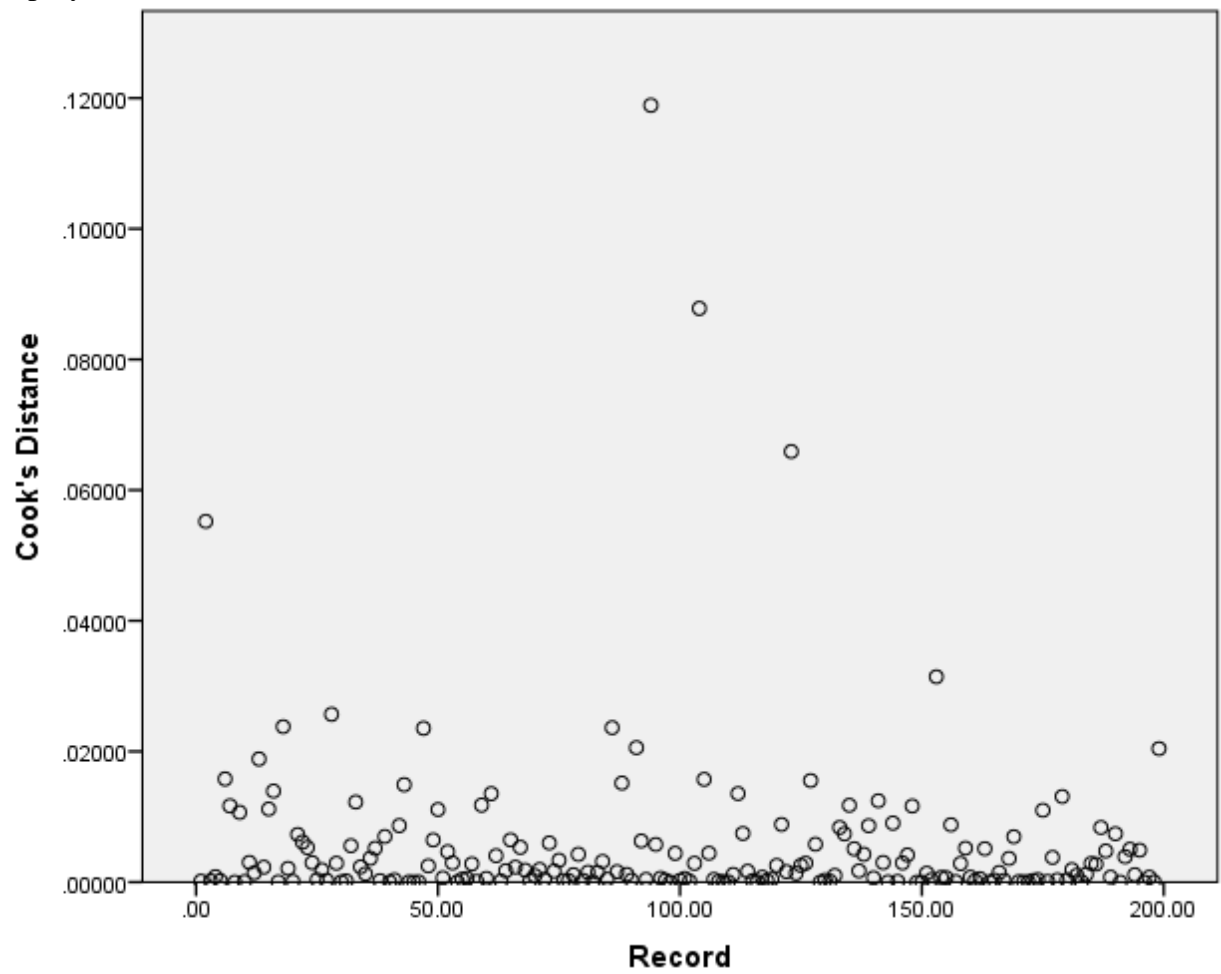 Rotation Method: Promax with Kaiser Normalization.
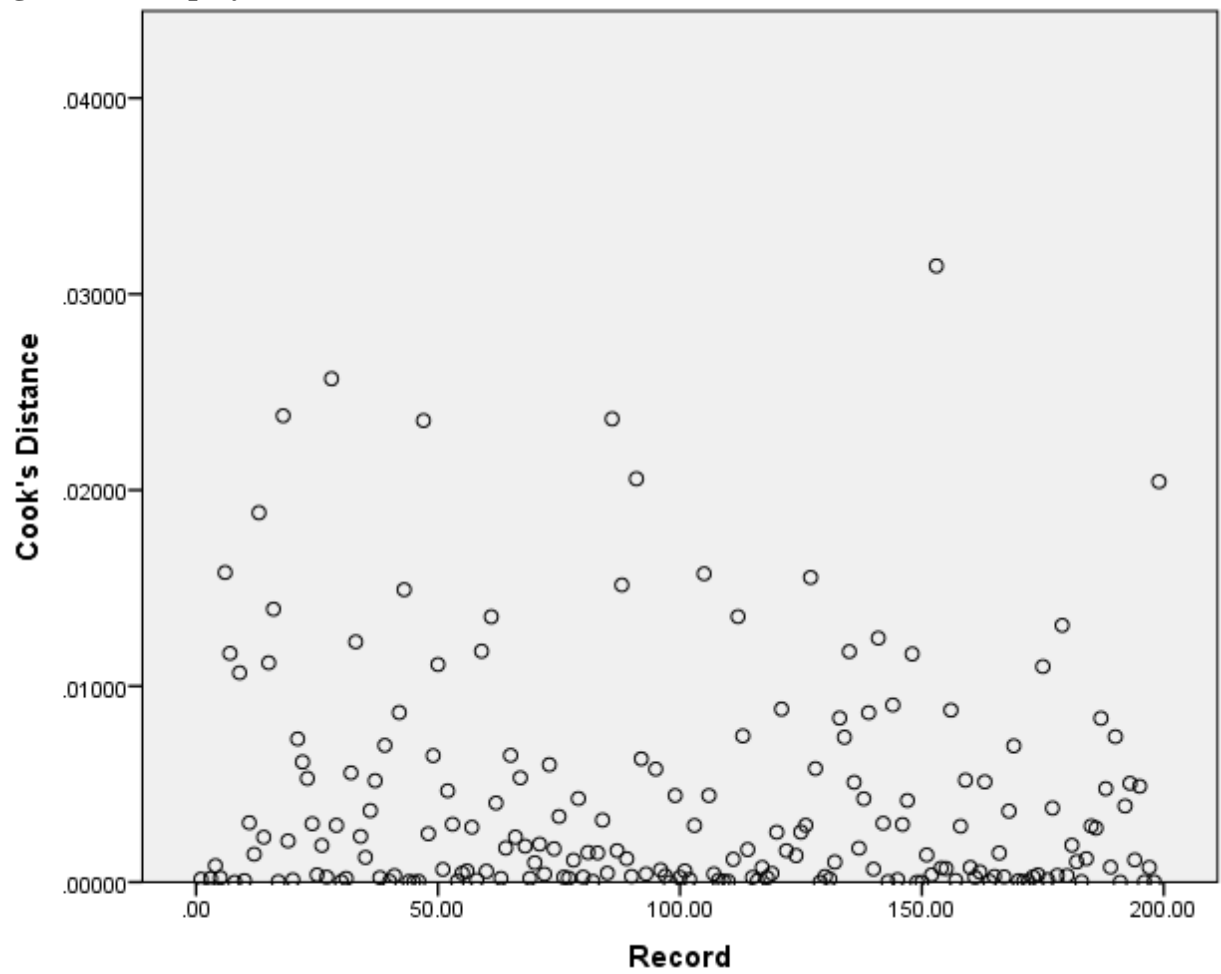a. Rotation converged in 6 iterations.

Figure A1: CFA with loadings (Employee Dataset)
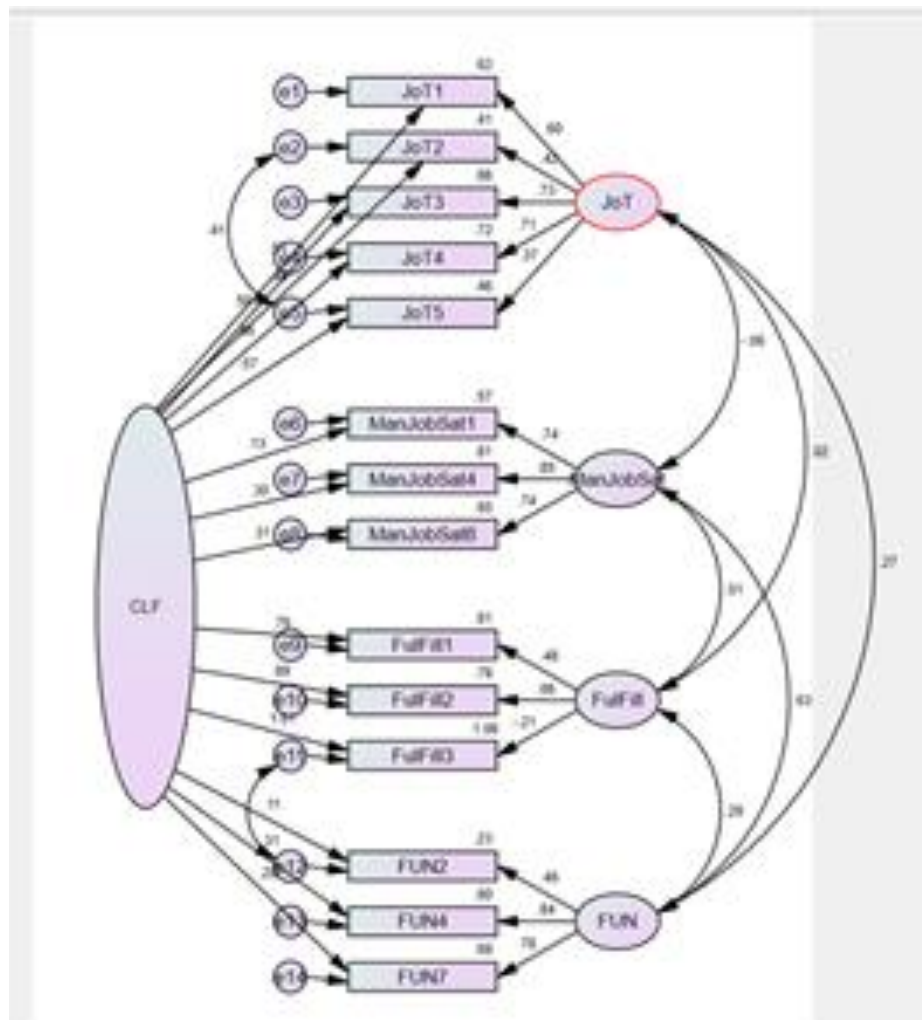
Employee Outliers (Initial Pass)

Figure A2: Employee Outliers with Outliers removed

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