

The Effects of Higher Education Organizational Consolidations on Student Stress Levels

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[Abstract] The purpose of this study was to investigate the stress experienced by university students during a higher education (HE) organizational merger. Data were obtained by employing a survey designed to measure Post Traumatic Stress Disorder (PTSD) in human subjects. The survey population was taken from students in both involved institutions (n=93) who experienced the subject merger. Six of the eight groups surveyed displayed significant stress differences. Students from the smaller university experienced stress related to the cancellation of academic majors, new requirements to finish prior academic programs, and a general lack of information on the conduct of the merger. Students from the larger university experienced stress for mainly logistical reasons, i.e., a lack of parking spaces or available classes. Additionally, many students from the smaller university experienced potentially debilitating levels of PTSD categorized stress. This study demonstrates that students experience significant levels of stress during a HE merger and that in some cases these stress levels can be devastating. Understanding that HE mergers can create significant stress levels in students could allow administrators to more carefully address student stress levels. The consequences for student stress during a HE merger has not been extensively studied. This is the first study to actively investigate stress development for this type of situation and this target group. Similarly, the stress effect of mergers on customers in other industries outside of higher education has not been extensively studied, thereby suggesting a new area of research activity.

[Keywords] University students; stress; organizational change; post-traumatic stress disorder

Introduction

Mental and physical stress due to a demanding lifestyle are consistent conditions for most individuals living and working in modern societies (Holmes & Rahe, 1967; Viner, 1999; Pluta & Rudawska, 2016). Further, the connection between various human stressors and physiological as well psychological manifestations, such as depression, post-traumatic stress disorder (PTSD), cancer development, and various forms of cardiovascular disease are well documented in the literature (Benjaminsen, 1981; Jacobs & Charles, 1980; McPherson-Sexton, 2006; Theorell, 1974). Stress related diseases in the largest countries are estimated to exist as the most widespread and debilitating of all health disorders by 2030 (Chatterji et al., 2008). Persistent, long-term stress has been correlated with a lack of concentration, irritability, headaches, eating disorders, and depression (Holinka, 2015). We identified college students, both at the undergraduate and graduate levels, as a population representing a subset of the general population that experience stress events associated with changes in life conditions.

The sudden and abrupt change associated with engaging in college life, whether experienced on a full or on a part-time basis, is a major source of physiological stress (Serlachius, Hamer, & Wardle, 2007). The stress created by the social, physical and mental transition to an academic environment is a main source of stress among college students (Deroma, Leach, & Leverett, 2009; Ross, Niebling, & Heckert, 1999). Further, the various forms of stress experienced by college students can have a negative effect on academic performance and accomplishment (Struthers, Perry & Menec, 2000; Talib & Zia-ur-Rehman, 2012). Therefore, to control, lessen, or mitigate stress for college students, it is important to understand its sources.

Consolidations among higher education (HE) organizations mergers have been increasing in frequency (Mitchell, 2015). These consolidations have listed goals of achieving efficiency, reducing costs and various forms of duplication, providing more options for students, and strengthening institutional competitiveness (University Mergers in Europe, 2015). The relative success or failure of a higher education or academic merger can be greatly affected by the attempt to combine two or more separate cultures. The objective of combining disparate cultures can be the most difficult and arduous part of any form of merger whether attempted in an academic or corporate setting (Bradt, 2015; Rigdon, 2000). Ribando and Evans (2015) noted that academic mergers can create considerable stress for faculty and administrators. While many forms of student psychological stress have been investigated, such as plans for future careers, interpersonal relationships, academic grades, competition, deadlines and selecting majors as well as classes (Lee & Jang, 2015), the stress effect of these higher education mergers on student populations has not been extensively researched.

The purpose of this research effort is to investigate the effect on student stress levels as result of a recent higher education merger between Kennesaw State University (KSU) and Southern Polytechnic State University (SPSU). Specifically, students enrolled in each organization's business administration program, that being the Michael J. Coles College of Business at Kennesaw State University and the Business Administration Department at the Southern Polytechnic State University's College of Engineering and Engineering Technology were surveyed to determine the stress effects, if any, of the merger between these two undergraduate and graduate level business educational programs.

Literature Review

Higher Education/Academic Mergers

Trautwein (1990) proposed an abstract of the theoretical motives for organizational mergers by defining three broad categories or groups of mergers: (1) merger as a rational choice, (2) merger as a process outcome, and (3) merger as a macroeconomic phenomenon.

The link between Trautwein's theory and HE mergers has not been extensively researched. In her study of 41 higher education mergers in England during the period 1987 – 1994, Rowley (1997) provides the most representative investigation on the connection between corporate merger motives and those seen in HE institutions. Rowley documents that the HE merger motive data "spread throughout his [Trautwein's] model, demonstrating its comprehensiveness, but clustered very strongly in 'gains through synergies' (for example, of marketing, product, and knowledge) and nearly as closely in valuation theories (the belief that 'we can run it differently and better')" (p. 259). Carrying the justification for merging further, Johnson, Scholes, and Whittington (2005) note that cost efficiency is the most frequently stated reason for merging in the public sector, but Fielden (1991) found that in higher education, mergers were academic and strategic, and not particularly motivated by cost savings. Trautwein (1990) attempts to address this inconsistency by noting that "efficiency theory nevertheless provides an efficient language of 'selling' mergers. Mergers need marketing just like products, and effectively addressing the public of regulatory institutions in a merger may be critical to its success." (p. 293).

When considering the effects of mergers and acquisitions, the research offers scant support in terms of levels of success associated with M&A activity between corporate organizations (Choi, 2011). With respect to academic institutions, the overall success rate of merger actions is much higher, in some cases approaching 90% (Rowley, 1997).

Higher education (HE) mergers have been completed in many parts of the world and the pace seems to be increasing. Such mergers have been initiated by governmental bodies as well as by the HE institutions themselves. Stated goals of consolidation include achieving efficiency, cost reductions, reducing duplication, providing a larger range of options for students, standardizing credits for transfer across institutions, and, in several cases, improving regional and international competitiveness and enhanced rankings (University Mergers in Europe, 2015).

Harman and Harman (2003) described the different forms that academic mergers can adopt. HE mergers can be either voluntary or involuntary. In the voluntary form, the institutions initiate the merger. If

involuntary, a source of external pressure initiates the organizational change, frequently see through some level of influence by a governmental entity. Further, the HE merger can be categorized as either a *consolidation* or a *take-over*. In a consolidation, two or more academic organizations of similar size converge to form a new arrangement. In contrast, a take-over occurs when a larger institution takes over a smaller one. Harman and Harman (2003) noted that consolidations tend to require more effort and time to complete. Take-overs are generally more uncomplicated as academic divisions in the smaller organization are typically blended into the bigger merger partner. Further, HE mergers can be structured as single sector or cross-sectional in nature. In the single sector version, HE institutions in the same type of educational sector blend together, an example being two graduate degree conferring universities. In a cross-sectional grouping, a HE university could merge with a post-secondary, non-university technical school. In addition, two or more merger affiliates might participate in the organizational transformation. Finally, somewhat similar and very different academic profile institutions can group together.

In one case, a horizontal merger could occur between HE universities that have similar, sometimes the same, fields of study. On the other hand, a vertical merger would include institutions that offer courses in different areas, e.g., a medical university and a business college. Applying Harman and Harman's (2003) classifications to the merger of KSU and SPSU at the *university* level, the merger was involuntary, a take-over, single-sector, two-partner, and vertical in nature.

Viewing the merger between the Michael J. Coles College of Business at Kennesaw State University (KSU) and the Department of Business Administration at Southern Polytechnic State University (SPSU) at the *business program* level, some similarities and differences existed. At this lower organizational level, the merger was involuntary, a take-over, single-sector, two-partner, but more horizontal in nature, as there was significant overlap in academic disciplines.

HE mergers have occurred worldwide with the apparent increasing speed. Since 2000, Almost 100 HE mergers were completed in Europe since 2000 (Mitchell, 2015). France leads in academic mergers as a result of the government's Grand Excellence initiative. This action has encouraged the development of groups of universities, some that may result in mergers. The intention is to meet the challenge of competing with other global HE institutions (Mitchell, 2015; Consolidation of Two Elite Paris Universities Confirmed for 2018, 2016). In other examples, Germany and Finland experienced positive results in their HE merger activities. From 2009 to 2013, the Karlsruhe Institute of Technology raised enrollment and research income by 50%. Similarly, the newly merged Alto University in Finland, raised its QS ratings by 50 points (Mitchell, 2015).

Human Stress Response during Organizational Mergers

According to Ribando and Evans (2015), the culture of an organization, including its beliefs, customs and values, can greatly affect its employees. When this culture begins to change, particularly because of a merger, employees can begin to feel disconnected from the organization. HE mergers can disrupt how employees view their occupational identity and fit with the newly combined organization. The connection between an organization's culture and an individual's perception of their value to that organization has been termed as organizational fit (P-O fit) or the extent to which an individual believes and observes that they are compatible with the organization to which they are associated (Cable & Judge, 1996; Adkins & Caldwell, 2004). The connection between P-O fit of an individual or employee with an organization and the numerous human physiological and psychological reactions such as stress responses, their desire to remain associated with and loyal to an organization has been well researched (Benton & Austin, 2010; Da Silva, et. al., 2010). Additionally, Staufenbiel and Konigumlaut (2010) found that organizational mergers can increase employee feelings of stress as a result of insecurity about their jobs. Employees can also become confused about their work roles as their manager's expectations change or shift because of an impending merger (Ribando & Evans, 2015).

The logical extension of this potential effect on P - O fit in an academic organization merger or consolidation would be to consider the primary "users" or "customers" of universities or colleges, that being their students. While students have been termed partial employees by some researchers (Hoffman &

Kretovics, 2004) for the purposes of our study, we employ two representations of the relationship that students form with an academic institution: (1) a service marketing terminology that views students as true *customers* of higher education institutions, and (2) an application of Aldrich's (1999) notion that within the associative coherence model, students can be viewed as "users" of higher education resources. Many studies have commented that academic mergers have the propensity to induce stress in students (Meek, 1995; O'Neill, 1997). However, scant research has been conducted that focuses on the direct effect academic institution mergers have on students. As a representative example, Giessner, et. al., (2006) completed a study where in one part of their investigation, students were asked to evaluate a theoretical merger situation to determine potential levels of support for a merger based on associated prior status. Outside of academic institution activity, research on the effects of mergers and acquisitions on customers is equally sparse. Oberg (2013) conducted the first systematic literature review of customer roles in mergers and acquisitions and generally discovered that customers are discussed to a limited extent. Oberg's (2013) review did note that parties involved in a merger or acquisition will experience a loss of customers and that these customers can take on roles that can be described as *affected* and as a *victim*. Whether directly affected or victimized because of a merger or acquisition, psychological or physiological effects on customers was not found as a result of Oberg's literature search. There exists a relative lack of research and investigation into the effects mergers and acquisitions have on an organization's customers, whether those organizations are academically or profit oriented.

Research Hypotheses

The consolidation of the business education programs at KSU and SPSU brought together two disparate missions and organizational cultures. As a focus of this study, we investigate the combination of two higher education programs that have very different missions and the subsequent effect of this merger on student stress levels. This contrasting notion can be reflected in the accreditation differences between the two organizations. The Coles College of Business at KSU is accredited by the Association to Advance Collegiate Schools of Business (AACSB) while the Business Administration Department within the College of Engineering and Engineering Technology at SPSU was accredited by and was a founding member of the Accreditation Council for Business Schools and Programs (ACBSP).

In a basic sense, this accreditation difference translates to contrasts in what each organization focuses on: one maintains a stronger focus on research (KSU), while the other on teaching (SPSU). Further, while both organizations had established graduate programs, those at KSU were more developed and prolific, offering graduate level degrees in several disciplines as well as many executive education programs. SPSU offered only a Master's in Business Administration degree and a Master's of Science in Accounting degree.

The size and structure of each organization demonstrates diverse cultural components. Within the SPSU Business Administration Department, 16 full-time faculty members with academic disciplines in management, finance, accounting, marketing, economics, and management information systems directly reported to one department chairperson. The department was housed in the School of Engineering Technology and Management. In the Coles College of Business, over 150 faculty members, organized into four separate departments (marketing and professional sales, information systems, management and entrepreneurship, as well as economics, finance, and quantitative analysis) and one school, the School of Accounting exist within a defined hierarchical structure.

Faculty research requirements are also quite different in that specific research publication objectives are defined within the Coles College to a much greater degree than that of the SPSU Business Administration Department as SPSU was much more teaching focused even though some research was required of the faculty who were not classified as lecturers (13 total full-time faculty members). Ribando & Evans (2015) characterized their higher education academic merger as the bringing together of a corporate and a collegial culture as defined by Kezar & Eckel (2002). This distinction can easily be applied to the merging of the KSU and SPSU business programs. Harman (2002) notes that in higher education mergers, the research oriented institution will be viewed as more "advanced" compared to a merger partner

that is more teaching focused. Further, over time the more “advanced” or superior culture (research oriented) will supplant that of the teaching centered culture (Benton & Austin, 2010).

Research strongly suggests that if not properly managed, higher education mergers can cause significant stress in those staff persons involved in the transition (Harman, 2002). What is the effect on the students from both merging institutions? Do they experience stress as a result of the combination of inherently different academic cultures? The purpose of this investigation is to determine the effect of a higher academic merger on the student populations of both organizations, in this case, students from the Business Administration Department at SPSU and from the Coles College of Business at KSU. This focus of the investigation is not well represented in the research on human stress levels during higher education mergers and consolidations.

To seemingly add more stress to SPSU students, one of the two existing graduate business degrees was eliminated (those students were not allowed to transfer to KSU) and the students in the one remaining graduate degree were given one year to complete their degree or dis-enroll from the school without completing their program. From a practical perspective, in both cases it is difficult to transfer graduate credits to an entirely new school. Of the four undergraduate business degrees at SPSU, three were allowed to transition to KSU degrees with different requirements but one was required to finish by the time the merger was finalized or the student would be forced to leave school without finishing their degree requirements.

Our research questions are developed to determine which student components experienced any level of stress associated with the KSU/SPSU business program merger. As a general practice, we start by testing stress levels between the two groups, that of students enrolled in the KSU and SPSU business programs. This approach underrepresented stress levels on SPSU students as the survey was conducted many months after the merger process. At that point, the students in the two SPSU degrees that were eliminated had left the university. We were subsequently unable to contact many of them to participate in the survey. We also subdivide the larger group into men and women and compare their responses between business programs:

H1a: Students enrolled in the SPSU business program will experience more stress than those students enrolled in the KSU business program.

H1b: Male students enrolled in the SPSU business program will experience more stress than those male students enrolled in the KSU business program.

H1c: Female students enrolled in the SPSU business program will experience more stress than those female students enrolled in the KSU business program.

Considering the merger effect further, we target men and women within each program and in separate programs to determine specific stress levels:

H2a: Male students enrolled in the SPSU business program will experience more stress than those female students enrolled in the SPSU business program.

H2b: Male students enrolled in the KSU business program will experience more stress than those female students enrolled in the KSU business program.

H2c: Male Students enrolled in both programs will experience more stress than those female students enrolled in both programs.

Finally, we investigate the stress effect of the program mergers on graduate level students both between each program and specifically in the SPSU business program. This particular comparison was of strong interest to us as the graduate degree programs (Master of Science in Accounting; Master of Business Administration) at SPSU would formally be terminated. This situation could potentially place individual graduate level students in a situation where time and money spent towards completing a degree program at SPSU could not be finished or transferred to another academic institution:

H3a: Graduate students enrolled in both programs will experience more stress than those undergraduate students enrolled in both programs.

H3b: Graduate students enrolled in the SPSU business program will experience more stress than those undergraduate students enrolled in the SPSU business program.

In a general sense, the hypotheses for this investigation were developed to determine the extent to which SPSU students (who existed within a higher education culture that would be supplanted as a result of the merger action) at various levels of their degree completion had experienced any type of stress as a result of the impending consolidation and if so, what types of stress they experienced. Added information as to the direct effect on individual degree completion and coping mechanisms for experienced stress were collected.

Method

Measure and Instrument Development

To measure student stress levels associated with the consolidation between both universities, we developed a survey instrument based on the Impact of Events Scale - Revised (IES-R) (Horowitz, Wilner & Alvarez, 1979; Weiss, 2007). The IES-R was initially developed in 1997 to reflect DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, 4th Edition) criteria for post-traumatic stress disorder (PTSD) and is a widely-used measure for determining PTSD as it relates to a specific event. The choice of the IES-R as a basis for our survey instrument was made after a careful review of available stress-related assessments (Elhai, et. al., 2005). We received permission to use the IES-R to include the most current forms as well as scoring methods and use issues from Daniel Weiss, Ph.D. (D. Weiss, personal communication, December 14, 2015). A comparison of the IES-R to the original assessment reveals that the revised measure incorporates changes that make it brief, quick and uncomplicated to administer and also to score on the part of the researcher. The IES-R provided us with a straightforward and representative screening tool for stress caused by a specific event.

Using the IES-R assessment as a basis for our survey instrument, we added four additional sections, each designed to further qualify each participant, or provide more information on the stress effects of the university consolidation (see Appendix 1 for the survey instrument). In terms of qualification, we asked questions related to the age of the participant (participants must be 18 years of age or older) as well as having been a student at the time of the announcement of the consolidation of the two universities. Before directing a participant to the IES-R section of the instrument, we also asked qualifying questions on whether or not they had experienced any type of stress from the anticipation of a university consolidation and if they did experience stress, the general reasons why they felt it. We also asked questions about how the students who felt stress tried to manage it and on how the consolidation would affect student's educational objectives. Finally, we asked a series of questions to collect demographic information on the survey participants.

Sample and Data Collection

We contacted students who were enrolled in either SPSU or KSU at the time of the merger announcement and invited them to participate in our research project by completing the survey instrument. A limited number of ex-SPSU students, who left without graduating as a result of the merger were also included in the survey request. This group of student respondents was comparatively small due to the lack of non-SPSU contact information. We conducted the survey 18 months after the initial announcement of the consolidation which occurred on November 1st, 2014. All surveys were completed over a 22-day period in April and May, 2016. In total, we invited 377 students to respond to the survey and received 231 responses. After cleaning the data, we included 93 respondents in the study for a usable response rate of 24.67%. Respondents were not included in the study if they were not 18 years old or older at the time of the administering of the survey, were not a student at either SPSU or KSU at the time of the announcement of the consolidation, or did not fully complete the survey.

Of the responses, students from KSU made up 79.57% (n = 74), while SPSU students were 20.43% (n = 19) of the total. Gender based responses were divided equally between males and females: males were 47.31% (n = 44) of the total, while females were also 47.31% (n = 44) of the respondent group (5 students or 5.38% preferred not to report their gender). Finally, 93.10% (n = 81) of the respondents were undergraduate students, while 6.90% (n = 6) were graduate students (six students did not report their status).

Results

To address the eight hypotheses that we developed, a difference of means calculation was performed on the collected survey data. The results of the calculation are shown in Table 1:

Table 1

The Results of the Calculation

	X1-X2	T-Test	Std. Error	DF	2-tailed P Value p<.05?
All SPSU - All KSU	12.16	-2.28	5.34	91	0.0264 - Yes
Male SPSU - Male KSU	4.7	-0.65	7.24	42	0.5203 - No
Female SPSU - Female KSU	22.18	-2.31	9.59	42	0.0256 - Yes
Male SPSU - Female SPSU	-6.77	-0.6	11.23	16	0.9509 - No
Male KSU - Female KSU	10.72	2.5	4.28	68	0.0146 - Yes
Male Both - Female Both	8.36	2.07	4.05	86	0.0419 - Yes
Grad Both - Undergrad Both	48.69	-5.59	8.71	85	0.00001 - Yes
Grad SPSU - Undergrad SPSU	39.8	-2.59	15.36	16	0.0197 - Yes

The calculated p-value of 0.05 (or significance level of the test) is a commonly used statistical threshold to determine whether a significant difference exists between the means of compared items. If the p-value is less than 0.05, the null hypothesis is rejected (i.e., no difference between compared items) and as a result a significant difference does exist, while if the p-value is greater than 0.05, it cannot be concluded that a significant difference exists.

In reviewing the calculated p-values for each of the stated hypotheses, significant differences do exist between the evaluated groups. Looking at the initial collection of hypotheses (H1a, b, and c) where direct comparisons were made between groups of SPSU and KSU students, SPSU students appear to have experienced more stress as a result of the merger than KSU students (H1a). Further, male SPSU students did not experience more stress than their male KSU counterparts (H1b), while female SPSU students did experience more merger related stress than female KSU students (H1c).

Probing further into the effects on males and females, the second grouping of hypotheses (H2a, b, and c) show differences in stress levels between male KSU students and female KSU students as well as between male students from both universities combined and female students from both universities combined (H2b, H2c). There was not a significant difference between male and female SPSU student stress levels because of the merger (H2a).

A comparison of the stress effect of the merger on graduate level students offers some significant although not surprising results. Comparing graduate students at both universities with their fellow undergraduate students (H3a) shows a significant difference, i.e., graduate students did experience more stress because of the merger of the two universities than did the undergraduate students from both schools. In this case, the p-value indicates what could be termed a statistically highly significant difference ($p < 0.001$). Finally, SPSU graduate students did experience more stress than their SPSU undergraduate counterparts (H3b). Of interest to the research team was the overall stress scores as calculated by the IES-R instrument. The revised version of the instrument has an overall scoring range of 0 to 88. Prior research has provided interpretations of various scores within this range. A score of 24 or more indicates that PTSD is a clinical concern (Asukai, et al., 2002). Survey respondents with a score of 24 or more who do not have full PTSD will have partial PTSD or at least some of the symptoms (Asuki, et al., 2002). A score of 33 and above represents the best threshold for a probable diagnosis of PTSD (Creamer, Bell & Falilla, 2002). Finally, an IES-R score of 37 or above indicates a stress level that's high enough to suppress a person's immune system function, even ten years after an impact event (Kawamura, Yoshiharu & Nozomu, 2001). Table 2a summarizes IES-R scores for men and women student respondents:

Table 2a

IES-R Stress Level Comparison – Men vs. Women Students

IES-R Stress Level Scores	SPSU Total	SPSU Men	SPSU Women	KSU Total	KSU Men	KSU Women
Greater than 24 but less than 33:	2	1	1	3	1	2
33 and over but less than 37:	3	2	1	1	0	1
37 and over:	5	1	4	12	11	1
Total:	10	4	6	16	12	4
Percent of Total Category Respondents:	52.63%	36.36%	85.71%	21.62%	21.62%	11.43%

Table 2b summarizes IES-R scores for undergraduate and graduate student respondents.

Table 2b

IES-R Stress Level Comparison – Undergraduate vs. Graduate Students

IES-R Stress Level Scores	SPSU Total	SPSU UG	SPSU Grad	KSU Total	KSU UG	KSU Grad
Greater than 24 but less than 33:	2	1	1	3	3	0
33 and over but less than 37:	3	2	1	1	1	0
37 and over:	5	4	1	12	11	1
Total:	10	7	3	16	15	1
Percent of Total Category Respondents:	52.63%	50.00%	60.00%	21.62%	22.06%	100.00%

In reviewing the responses to the survey, 52.63% of the SPSU students indicated an IES-R stress score of 24 or higher, while 21.62% of KSU students felt stress on the IES-R scale of 24 or higher. Of more significance was the fact that any students reported an IES-R score of 37 or higher, indicating a potentially debilitating level of stress as a result of the merger. In total, five SPSU students (26.31% of the total number of SPSU students) and 12 KSU students (16.21% of the total number of KSU students) reported stress levels of 37 points or higher. The number of students who reported an IES-R stress level in excess of 33 was a surprise to the research team. While having interactions with students who appeared to demonstrate considerable concern regarding the effects of the KSU-SPSU merger (both researchers were SPSU professors at the time of the merger announcement and completed the organizational transition to KSU), in an anecdotal sense we did not anticipate the level to which stress had been manifested in the SPSU student body. In the open comment section of the survey, distinct themes were encountered. KSU students reflected on the logistical constraints of reduced parking and course availability:

The merger created lots of issues with getting into classes and having enough seats in classes. This made it stressful during registration times because there was much confusion as to what classes students should take and whether they were available (student respondent, personal communication, 4/11/16).

The only stress I had was trying to register for classes. We did not have a big enough increase in professor/class offerings to accommodate everyone. I have had to get 4 closed class overrides since [the] merger (student respondent, personal communication, 4/11/16).

I feel as if the only stress that I had endured was signing up for classes. I felt that the University didn't warn people about how many more people we were merging with and it made it difficult to get the classes I needed to graduate on time (student respondent, personal communication, 4/13/16).

They could have kept us informed. When we registered, we picked back to back classes not knowing they were on different campuses. that messed up schedules then classes were filled (student respondent, personal communication, 4/13/16).

After the merger happened, it seemed that parking was harder to find because KSU made most of the classes on the Kennesaw campus. This caused heavy traffic and requiring students to leave earlier than normal... (student respondent, personal communication, 4/23/16).

SPSU students described the effect of the merger in a much more detailed and in some cases, personal manner:

I cannot begin to explain how much this merger affected my life and also everyone's life in every aspect. It ruined people's careers and futures for some. Depression was at an all-time high when it was first announced and way after. I would extremely discourage mergers if at all possible. And if they do happen they need to be handled better, more organized and both universities need to be more compassionate and understanding of their students and what they have to go through. I would do anything to go back in the past and do everything I could do to avoid this KSU SPSU merger from ever happening (student respondent, personal communication, 4/22/16).

This merger was the most unsatisfactory, unfair, unprofessional situation that I have ever witnessed. Those in charge of carrying out the merger did not properly or fully inform students of the process and they were misleading and untruthful. I had to contact the news stations, the dean of KSU and provost in order to get someone to tell us the truth about what was going on. It took time from work, school studies and my personal time... (student respondent, personal communication, 4/12/16).

I felt like they tried to push out the SPSU students and if we had not given them resistance the probably would have. Not even my advisor could give me information when I felt like I needed it

most (like planning for the next semester). I would never have started the program at SPSU if I would have known I would have to rush to finish. Not only was I rushed because of lack of time to complete due to mandated cut offs, but also because a semester at KSU cost me more than \$1,000 more for one semester, for the exact same course work, if not even of lesser quality because I was being rushed. This was a terrible experience and made me lose all respect for the KSU. I will never make a donation or support KSU moving forward because of the way I was treated (student respondent, personal communication, 4/13/16).

I had to pay for 6 non-credit classes. I had to reapply for my major. The set-up degree works was not timely. The SPSU advisors were very good and tried very hard to help, but they couldn't get the important information to give the students. The SPSU professors were treated very disrespectfully and so were the students (student respondent, personal communication, 4/13/16).

I think the whole entire thing was unnecessary! If the state was worried about saving money there are plenty of other ways to do it. Jeopardizing young aspiring professionals' education in the process is not acceptable. Then on top of all of that the way that KSU handled the whole thing was very unprofessional and unbecoming of an academic institution. I'm just glad I could graduate before the "Hostile takeover" was finalized, others were not so lucky (student respondent, personal communication, 4/22/16).

I personally spent an excessive amount of hours just trying to meet with an adviser in order to register for classes. This coupled with the amount of driving time, and time taken away from other personal requirements put an unexceptionable amount of burden on myself as a student and as an individual. This transition was done poorly and could have been handled much better as well as more professionally. Overall I felt that in the end this was more of a hostile take-over rather than a merger (student respondent, personal communication, 4/13/16).

We collected additional data on how SPSU students attempted to cope or deal with the added stress imparted by the merger. Survey responses show that many SPSU students talked or interacted with other individuals whom they believed could offer more information: (1) 84.21% of the SPSU students engaged their professors and separately, their academic advisors, (2) 42.11% of SPSU students spoke with various SPSU administrators. Further, many SPSU students connected with close friends (73.68%) and/or their families (78.95%) to cope with the stress created by the merger.

Discussion

The analytical stress comparisons between the two student groups, that of students who were enrolled at either SPSU or KSU at the time of the announcement of the merger clearly demonstrate that SPSU students experienced more stress than their KSU counterparts in all but two of the comparison groups indicated by our initial hypotheses. Further, 52.63% of SPSU students as well as 21.62% of KSU students who responded to the survey request reported IES-R scores that would indicate a PTSD level ranging from a basic clinical concern (at lower levels) to immune system suppression (at higher levels). Finally, our study demonstrated that once faced with this stress, students did attempt to reach some type of resolution by primarily seeking out more information. Both researchers interacted with SPSU students during the merger period and attempted to counsel and coach them to reach a reasonable level of understanding and acceptance of the situation. This basic study has shown that HE mergers and consolidations can produce significant levels of stress in student populations.

The theoretical implications of this study show that more research in this area, that being the stress effects of organizational mergers and consolidations, both in institutions of higher learning as well as profit and non-profit corporate firms, is justified. Our investigation revealed that the resulting stress response of end-users or customers in an organizational merger is an under-researched area of study. Academic disciplines ranging from business administration and management to the behavioral sciences can greatly

add to the understanding of how different types of customers, to include students in a HE consolidation or merger, react to radically changing organizational structures.

The overall managerial implications of this study point directly to the necessity of clear communication to HE customers/users, i.e. students, about the conduct of any merger or consolidation, establishing defined resources designed to help address the stress that students experience during merger periods, as well as a having established a clear process of indoctrinating or accepting students into the new consolidated culture, can potentially ease the difficulties encountered during the blending of two sometimes disparate organizations.

Study Limitations

One limitation involved our inability to contact students who had left SPSU after the merger announcement. These students had realized that they would not be able to graduate and thus decided to discontinue their studies or transfer to another institution.

Another limitation of our study involved the timing of the administration of the survey instrument. The IES-R was initially designed and validated using a survey time frame of the preceding seven days. As such, the IES-R should be administered to persons who experienced a traumatic event within the past seven days. This was not possible given the logistical and practical constraints for our study. As a result, we disclose that a non-standard, modified version of the IES-R measure was used in our study. However, recent studies performed after the development of the IES-R (e.g., Amberg, Michel & Johannesson, 2014) demonstrate the validity of the IES-R to screen for chronic PTSD in longitudinal research studies where respondents report stress symptoms over time periods that exceed seven days. Future research studies may further demonstrate the validity of the IES-R questionnaire over periods that exceed seven days.

References

- Aldrich, H. (1999). *Organizations evolving*. Sage.
- Arnberg, F., Michel, P., Bergh Johannesson, K. (2014). Properties of Swedish posttraumatic stress measures after a disaster. *Journal of Anxiety Disorders*, 28(4) 402-409.
- Adkins, B., & Caldwell, D. (2004). Firm or subgroup culture: where does fitting in matter most? *Journal of Organizational Behavior*, 25(8), 969-978.
- Asukai, N., Kato, H., Kawamura, N., Kim, Y., Yamamoto, K., Kishimoto, J., & Nishizono-Maher, A. (2002). Reliability and validity of the Japanese-language version of the Impact of Event Scale-Revised (IES-R-J): Four studies of different traumatic events. *Journal of Nervous and Mental Disease*, 190(3), 175-182.
- Benton, A., & Austin, M. (2010). Managing nonprofit mergers: The challenges facing human service organizations. *Administration in Social Work*, 34, 458-479.
- Benjaminsen, S. (1981). Stressful life events preceding the onset of neurotic depression. *Psychological Medicine*, 11(2), 369-378.
- Bradt, G. (2015, June 29). The root cause of every merger's success or failure: Culture. *Forbes*. Retrieved from <http://www.forbes.com/sites/georgebradt/2015/06/29/the-root-cause-of-every-mergers-succe>
- Cable, D., & Judge, T. (1996). Regular Article: Person-organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67, 294-311.
- Chatterji, S., Kowal, P., Mathers, C., Naidoo, N., Verdes, E., Smith, J., & Suzman, R. (2008). The health of aging populations in China and India: by 2030, older adults will bear two-thirds of the total disease burden in China and nearly half in India. *Health Affairs*, 27(4), 1052-1063.
- Choi, M. (2011). Employees' attitudes towards organizational change: A literature review. *Human Resource Management*, 50, 479-500.
- Consolidation of the two elite Paris universities confirmed for 2018. (2016, April 18). *SI News*. Retrieved from <https://www.studyinternational.com/news/consolidation-of-two-elite-paris-universities-confirmed-for-2018>

- Creamer, M., Bell, R., & Failla, S. (2003). Psychometric properties of the impact of event scale--revised. *Behaviour Research and Therapy*, *12*, 1489-1496.
- DaSilva, N., Hutcheson, J., & Wahl, G. D. (2010). Organizational strategy and employee outcomes: A person-organization fit perspective. *Journal of Psychology*, *144*, 145-161.
- DeRoma, V., Leach, J., & Leverett, J. (2009). The relationship between depression and college academic performance. *College Student Journal*, *43*(2), 325-334.
- Elhai, J., Gray, M., Kashdan, T. & Franklin, C. (2005). Which instruments are most commonly used to assess traumatic event exposure and posttraumatic effects?: A survey of traumatic stress professionals. *Journal of Traumatic Stress*, *18*, 541-545.
- Fielden, J. (1991). Resource implications of mergers: are there any economies? *Higher Education Quarterly*, *45*(2), 158-166.
- Giessner, S., Viki, G., Otten, S., Terry, D., & Täuber, S. (2006). The challenge of merging: merger patterns, premerger status, and merger support. *Personality and Social Psychology Bulletin*, *32*(3), 339-352.
- Harman, K. (2002). Merging divergent campus cultures into coherent educational communities: Challenges for higher education leaders. *Higher Education*, *44*, 91-114.
- Harman, G., & Harman, K. (2003). Institutional mergers in higher education: Lessons from international experience. *Tertiary Education & Management*, *9*(1), 29-44.
- Hoffman, K., & Kretovics, M. (2004). Students as partial employees: A metaphor for student-institution interaction. *Innovative Higher Education*, *29*, 103-120.
- Holinka, C. (2015). Stress, emotional intelligence, and life satisfaction in college students. *College Student Journal*, *2*, 300-311.
- Holmes, T., & Rahe, R. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, *11*(2), 213-218.
- Horowitz, M., Wilner, M. & Alvarez, W. (1979). Impact of Events Scale: A measure of subjective stress. *Psychosomatic Medicine*, *41*(3), 209-218.
- Jacobs, T., & Charles, E. (1980). Life events and the occurrence of cancer in children. *Psychosomatic Medicine*, *42*(1), 11-24.
- Johnson, G., Scholes, K. & Whittington, R. (2002). *Exploring corporate strategy*. Prentice Hall International.
- Kezar, A., & Eckel, P. D. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts? *The Journal of Higher Education*, *73*(4), 435-460.
- Kawamura, N., Kim, Y., & Asukai, N. (2001). Suppression of cellular immunity in men with a past history of posttraumatic stress disorder. *American Journal of Psychiatry*, *158*(3), 484-486.
- Lee, J., & Jang, S. (2015). An Exploration of Stress and Satisfaction in College Students. *Services Marketing Quarterly*, *36*(3), 245-260.
- McPherson-Sexton, S. (2006). A comprehensive view of post-traumatic stress disorder: Populations, etiology, treatments, and more. *Journal of Police Crisis Negotiations*, *6*(1), 93-124.
- Mitchell, N. (2015, November 25). Big is beautiful for merging universities. BBC. Retrieved from <http://www.bbc.com/news/business-34902884>
- Meek, V. Lynn (1995). 'An insider's outside view'. In Harman, Grant and Robertson-Cuninghame, Rob (Eds.), *The Network UNE Experience – Reflections on the Amalgamated University of New England 1989-1993* (pp. 123-140). Armidale.
- Öberg, C. (2014). Customer roles in mergers and acquisitions: a systematic literature review. *Advances in Mergers and Acquisitions*, *12*, 59-74.
- O'Neill, A. (1997). The university of technology, Sydney – A study in the amalgamation of higher education institutions', project working paper. University of New England.
- Pluta, A., & Rudawska, A. (2016). Holistic approach to human resources and organizational acceleration. *Journal of Organizational Change Management*, *29*(2), 293-309.

- Ribando, S. & Evans, L. (2015). Change happens: Assessing the initial impact of a university consolidation on faculty. *Public Personnel Management*, 44, 99-119.
- Rigdon, J. (2000, July 1). The integration game. *Red Herring Magazine*. Retrieved from <http://www.joanrigdon.com/clips/IntegrationGame.html>
- Rowley, G. (1997). Strategic alliances: United we stand: A strategic analysis of mergers in higher education. *Public Money & Management*, 17(4), 7-12.
- Ross, S., Niebling, B., & Heckert, T. (1999). Sources of stress among college students. *College Student Journal*, 33(2), 312-317.
- Serlachius, A., Hamer, M., & Wardle, J. (2007). Stress and weight change in university students in the United Kingdom. *Physiology & Behavior*, 92, 548-553.
- Staufenbiel, T. and König, C. J. (2010), A model for the effects of job insecurity on performance, turnover intention, and absenteeism. *Journal of Occupational and Organizational Psychology*, 83, 101-117.
- Struthers, C. W., Perry, R. P., & Menec, V. H. (2000). An examination of the relationship among academic stress, coping, motivation, and performance in college. *Research in higher education*, 41(5), 581-592.
- Talib, N., & Zia-ur-Rehman, M. (2012). Academic performance and perceived stress among university students. *Educational Research and Reviews*, 7(5), 127.
- Theorell, T. (1974). Life events before and after the onset of a premature myocardial infarction. In Dohrenwend, B. & Dohrenwend, B. (Eds.), *Stressful life events: Their nature and effects*, (pp. 101-117) Oxford, England: John Wiley & Sons.
- Trautwein, F. (1990). Merger motives and merger prescriptions. *Strategic Management Journal*, 11, 283-295.
- University Mergers in Europe. (2014, December 7). IREG Observatory on Academic Ranking and Excellence. Retrieved from <http://ireg-observatory.org/en/355-university-mergers-in-europe>
- Weiss, D.S. (2007). The Impact of Event Scale: Revised. In J.P. Wilson & C.S. Tang (Eds.), *Cross-cultural assessment of psychological trauma and PTSD* (pp. 219-238). New York: Springer.
- Viner, R. (1999). Putting stress in life: Hans Selye and the making of stress theory. *Social Studies of Science*, 29(3), 391-410.

Appendix 1:

Student Merger Stress Survey - Start

I am 18 years of age or older:

Yes (go to Section 1)

No (end survey)

Section 1: University Enrollment Confirmation

On the day of the KSU/SPSU consolidation announcement (November 1st, 2013), I was a student at...

Southern Polytechnic State University (go to Section 2)

Kennesaw State University (go to Section 2)

Another academic institution (end survey)

Section 2: Stress Survey

This survey asks about your reactions to the announcement of the consolidation between Southern Polytechnic State University and Kennesaw State University, which occurred on November 1st, 2013. To complete the survey, you will need to recall how you reacted to the announcement of the consolidation and how these reactions changed over the period of several months after the announcement.

On the day of the KSU/SPSU consolidation announcement (November 1st, 2013) and for a period of several months after the announcement:

- I did experience some level of stress related to the consolidation (go to stress survey)
- I did not experience some level of stress related to the consolidation (end survey)

I experienced stress as a result of the KSU/SPSU consolidation announcement because I was concerned that (please rank order the reasons listed below, from 1-5):

- I would have to change the location of the university I was attending
- The cost of attending the consolidated university would be higher
- It would take a longer time for me to complete my degree and graduate
- I was concerned about the name of the university that would be printed on my diploma
- Other reason (fill in the blank) _____.

INSTRUCTIONS: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you **DURING THE SUBSEQUENT SIX MONTHS** with respect to the announcement of the consolidation/merger between Southern Polytechnic State University and Kennesaw State University, which occurred on November 1st, 2013. How much were you distressed or bothered by these difficulties?

Not at all = 0	A little bit = 1	Moderately = 2	Quite a bit = 3	Extremely = 4
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1. Any reminder brought back feelings about it.
2. I had trouble staying asleep.
3. Other things kept making me think about it.
4. I felt irritable and angry.
5. I avoided letting myself get upset when I thought about it or was reminded of it.
6. I thought about it when I didn't mean to.
7. I felt as if it hadn't happened or wasn't real.
8. I stayed away from reminders of it.
9. Pictures about it popped into my mind.
10. I was jumpy and easily startled.
11. I tried not to think about it.
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.
13. My feelings about it were kind of numb.
14. I found myself acting or feeling like I was back at that time.
15. I had trouble falling asleep.
16. I had waves of strong feelings about it.
17. I tried to remove it from my memory.
18. I had trouble concentrating.
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.
20. I had dreams about it.
21. I felt watchful and on-guard.
22. I tried not to talk about it.

Section 3: Responses to Felt Stress

This section explores different actions that you might have taken in response to any of the reactions listed in Section 2. After experiencing any of the difficulties in Section 2, what did you do, if anything, to lessen or eliminate their effects on you? (Check all that apply):

- I did not feel any of the reactions in Section 2 (go to Section 4).
- I spoke with one or more of my professors.
- I spoke with a university administrator.

- I spoke with a school/college advisor.
- I spoke with a college department chairperson.
- I spoke with a university counselor.
- I spoke with a medical professional (doctor, nurse, etc.).
- I spoke with a close friend of mine.
- I spoke with a family member.
- I attended update meetings on the progress of the merger/consolidation.
- I used various mental relaxation techniques (meditation, positive imagery, etc.).
- I decided to leave the university and attend another school.
- I engaged in physical activities (exercise, sports, etc.).
- I accelerated my academic course completion in order to finish my degree program as quickly as possible.
- I did nothing.

Go to Section 4...

Section 4: Relationship of Merger to Student Educational Objectives

The impact the merger had on my major was...

- No impact
- I had to change majors
- I was not able to finish a program of studies in my chosen major

The impact the merger had on my studies was...

- No impact
- I had to finish my studies quicker than I had planned
- I had to take additional courses
- I was not able to finish my planned studies
- I left the school in which I was enrolled

As a student, how do you feel you were treated by the university regarding the merger?

- Very fairly
- Fairly
- Unfairly
- Very unfairly
- No opinion

How well do you feel your university kept you informed?

- Very well informed
- Well informed
- Informed
- Not well informed
- No opinion

Go to Section 5...

Section 5: Demographic Data Collection

This section will ask demographic information about you.

What is your gender?

- Male
- Female

___ Self-described _____

What is your age?

___ 18 – 22

___ 23 – 27

___ 28 – 32

___ 33 – 37

___ 38 years old or older

Prior to the consolidation, my major was _____.

Because of the consolidation, did you have to change your major?

___ Yes - to what new major? _____

___ No

What level of student were you when the merger was announced?

___ Undergraduate

___ Graduate

___ Non-degree seeking

For undergraduate students, at the time of the merger announcement were you a...

___ Freshman

___ Sophomore

___ Junior

___ Senior

For graduate students, how many graduate, non-transition hours had you completed at the time of the merger announcement?

___ 0 - 6

___ 7 - 12

___ 13 - 18

___ Over 18

___ Not Applicable

Thank you for your participation in this survey!