# DRIVERS OF ENGAGEMENT IN PROFESSIONAL DEVELOPMENT ACTIVITY: A STUDY OF UNDERGRADUATE BUSINESS MAJORS

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# ABSTRACT

Since college and university students typically vary in their utilization of student services and resources, the variance in undergraduate business student engagement levels in professional development activity was explored by this quantitative study. Professional development is defined as career-related preparation of students for entry into the professional business environment and is accomplished through coaching, workshops, mentoring, student professional organization involvement, and internships that complement the content knowledge taught in the classroom.

The results of a mandatory student satisfaction survey were analyzed to identify drivers/correlates of engagement, specifically relative to participation in professional development activity at a mid-Atlantic, urban research institution with an undergraduate business school population of approximately 5,700 students. The goal was to assess the demographic, organizational and motivational drivers (using a distal to proximal flow of relevance) that serve as potential initiators of variance in engagement levels related to professional development activity. This study attempted to provide insight as to the types of students who are engaged or disengaged by examining a combination of student background characteristics, "pre-college" credentials, "college" credentials, and organizational/motivational factors. The existing literature has concentrated on identification of "good practices" leading to engagement, as well as the impact of

educationally purposeful activities on the higher education experience, but has not clearly identified the precise drivers of student engagement.  Academic research on undergraduate student engagement in professional development activity is even more challenging to locate and is practically non-existent.

The study population consisted of 864 graduating seniors who completed the mandatory senior student satisfaction survey.  Student demographic data from the University's information system as well as self-reported survey responses comprised the independent variables.  This information was used to create thirty drivers of engagement categorized into five variable sets.  The dependent variables, identified as behavioral indicators of engagement in student professional development activity, were derived from self-reported responses in the senior survey.  A factor analysis was used to create a TotalDV score relative to student engagement in professional development activity.

Descriptive statistics provided a picture of each group of students.  ANOVA and correlational analyses were used to determine the predictive factors (by variable sets) for professional development activity engagement (PDAE).  Twenty-five of the thirty independent variables produced significant correlations (.000) spanning the five variable sets thereby indicating that multiple factors are ultimately involved in this complex model of student engagement in professional development activity.

## ACKNOWLEDGMENTS

This dissertation is the culmination of a journey I chose to embark on a few years ago. I knew the excursion would not be without effort and sacrifice and I would like to acknowledge those who guided, supported, as well as inspired me along the way.

From an academic lens, my heartfelt appreciation goes to Dr. Corrinne Caldwell. Her expertise was invaluable in getting me to this point. From the first class I attended with her, I saw her as role model for those of us in higher education. Not only was her depth of experience extremely impressive, but her passion for excellence was inspirational and was very much appreciated. As I struggled to balance the demands of unexpected additional job responsibilities while making progress on a dissertation in my "spare time," she was understanding; yet she maintained high standards and consistently provided me with the assurance that I would get through this journey.

Dr. Joe DuCette made the quantitative study a reality for me. My original plan was qualitative and when plans changed (with the guidance of Dr. Caldwell), I was not sure how I would navigate the statistical portion. He was incredible in his ability to make complex concepts understandable with a caring, patient way of breaking down the information into principles that made sense to a non-statistician.

The credit for the inception of this journey goes to Dr. Gary Blau. Without his gentle but persistent "suggestions" to take my first doctorate level course, I would not be

To Mom and Dad,
Who taught me to "use my head" and
inspired me to reach for the stars.

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# CHAPTER 1

# INTRODUCTION

The topic of student engagement has generated significant interest over the last 20+ years and is particularly relevant to those within the academic community. Teachers, faculty and administrators constantly strive to create active learning environments that challenge and motivate students while simultaneously maximizing student potential. The higher education sector is no exception to this passion for inspiring students to invest in their growth and development. In an effort to improve student services and to positively impact student learning and success in undergraduate education, many colleges and universities have attempted to identify ways to increase engagement levels.

Unfortunately, there is not a solid understanding of *why* students are either engaged or disengaged. Substantial information on "good" practices related to student engagement exists, but research is still needed on identifying specific "drivers" of engagement. This is critical if institutions want to enhance the undergraduate educational experience by creating/implementing programs that trigger engagement and participation.

The goal of this quantitative study was to develop an understanding of the drivers of undergraduate business students' engagement, specifically utilization of professional development services. This dissertation discusses the initiation of interest in this subject, the actual issue at hand at a large mid-Atlantic urban research university, along with the

theoretical perspectives and research surrounding the topic of post-secondary student

engagement.  Since formal implementation of professional development programs (and

subsequent evaluation of professional development coaching) is a relatively new

endeavor in collegiate environments, a more familiar concept – career services, was

examined to provide context for this study.  This includes an overview of vocational

counseling and the career services profession that has served as a foundation for

professional development initiatives, as well as a brief discussion of elements thought to

be related to fostering student engagement.  These include:

- Career development programming
- Faculty involvement
- Internships/work experience
- Professional development of business students
- Educational expenditures
- Institutional/organizational factors

Finally, a detailed explanation of the methodology and procedure will also be

included for this quantitative study.

## A.  Statement of the Problem

Despite formal integration of professional development into the undergraduate

business curriculum at Schumann School of Business (pseudonym), students vary widely

in their estimation of value and levels of utilization.  A common assumption of business

school administration/faculty is that professional development is an important component

of the student's total academic experience.  Speculation suggests that participation in

such programs leads to enhanced success of its graduates thereby reflecting well on the

school and students.  This career-related "success" is important to the reputation of the school and is used in rankings as well as marketing efforts to prospective students and parents.  Additionally, employers look at the caliber of graduates to establish target schools for future recruitment efforts.  Despite the incentive for students to fully engage in professional development activity, levels of participation vary widely.

Why does this variance within professional development activity engagement exist?  Why is it that *"some students understand the relevance and 'connect the dots' while some don't?"*  Despite the fact that all undergraduate business students (approximately 5,700) at the Schumann School of Business have access to the same professional development services, attend the same orientations, and are on the receiving end of the same marketing efforts, some students immediately react with enthusiasm and become fully engaged in the process.  Conversely, other students, although exposed to the same information, do not appear to acknowledge the value of this professional development resource and do not fully utilize the program.  Others simply claim they are "too busy" to participate.  The issue is that oftentimes the students who do not actively utilize these resources are the ones that need it the most.  Some may even defend their lax attitude and "blame" the business school for not finding them full-time permanent employment upon graduation.  This expectation to be "placed" in a job has actually been noted on occasion in student satisfaction ratings in a well-known national survey on "Top Undergraduate Business Programs" by Bloomberg/BusinessWeek.

The above is problematic in that considerable staff, energy, and funding are devoted to providing professional development resources, training, and coaching; and when these services are not fully utilized, it is extremely frustrating to the administration. Institutional research shows that Schumann students, who have taken advantage of the services and immersed themselves into professional development activity, have been successful in their post-graduation career searches. Data from the class of 2010 indicated that 91% of students who utilized the professional development center (specifically JobNet) found full-time, permanent employment compared with 54% of the graduating class who did not use the Center's JobNet resources. Unfortunately, it often is the disengaged students who are the ones to blame the University for their less-than-successful job search.

In addition, hiring organizations expect a robust student response to their campus recruitment initiatives and when they sense a lack of interest at a particular school, they often "take their business elsewhere." Employers seek a substantial pool of academically strong, well-qualified, polished candidates and turn to the career or professional development office to assist in the delivery of that product. Whereas the reality of 100% full engagement of 5,700 undergraduates would test the capabilities (simply from a resources standpoint) of the six person professional development center staff at Schumann, the goal is to have all students value this comprehensive program and fully utilize the services. A lack of engagement in professional development appears to negatively impact students' job/career success and consequently influences student satisfaction levels.

**B. Purpose of the Study**

This study attempted to develop an understanding of the drivers that foster (or hinder) engagement in some students more than others. More specifically, the goal was to assess and identify the specific demographic, organizational and motivational factors related to undergraduate business students who are more (or less) engaged in professional development activity than their peers. In other words, what (pre-college and college) variables (i.e., gender, GPA, year in school, major, socioeconomic status, transfer status, SAT scores, etc.) and experiences (e.g., organizational impact, and faculty involvement) foster or hinder student engagement? Specifically, the relationship between these factors and the variance in undergraduate business student engagement levels at the Professional Development Center (PDC) - Schumann School of Business (pseudonym) was examined. The independent variables were organized into five categories and included: 1) Student Background 2) Pre-college Credentials 3) College-related Factors 4) Organization-related Factors 5) Motivation, Expectations and Attraction. Thirty specific variables formed this data set and were obtained via self-reported measures, as well as through ISIS, the Integrated Student Information System.

It was hypothesized that the above variables work in concert with each other and that certain factors may be more indicative of PDAE. Consequently, the above order was selected to suggest a distal to proximal flow with the expectation that the strongest antecedents are Motivation, Expectations and Attraction (#5), followed by Organization-related Factors (#4), College-related Factors (#3), Pre-college Credentials (#2) and Student Background (#1).

The aim of this study was to begin to fill the research gap about *why* some students are extremely responsive to professional development initiatives while others are not. Perhaps this study might inspire future research to further understand the engagement issue related to similar student services and career services operations. This could lead to insight as to how to create environments or conditions that promote student engagement in student professional organizations, relevant programming and internship recruitment activity that could ultimately impact student success when seeking full-time, permanent employment.

## C. Research Questions

The main research question of this study was:

- What drivers correlate with undergraduate business student engagement levels in professional development activity? In other words, why are some students more engaged than others?
    - o Is this variance in engagement levels due to certain factors related to a student's background/pre-college life? If so, what are those factors?
        - ▪ Do factors such as age, gender, parental education level, and transfer status affect students' engagement levels?
    - o Does a student's current situation affect his/her engagement level?
        - ▪ Do factors such as major, campus living arrangements and PT/FT status have an impact?
    - o Do certain types of experiences (faculty interaction, hours worked, living on campus and organizational impact) affect engagement levels?
    - o What is the hierarchy of the correlations between the above factors and student engagement levels?

At the conclusion of the study, the goal was to begin the process of answering the question of what are the correlates that play a significant role in fostering engagement.  In addition, are there supplementary factors, other than those specified above, that might lead to higher levels of engagement?

## D.  Definitions

*BA2101:*  Titled, "Professional Development Strategies," BA2101 is a one-credit course required as part of the undergraduate business curriculum at the Schumann School of Business.  The course is designed and administered by the staff of the Professional Development Center (PDC).

*Internship:*  Formal pre-graduation work experience directly related to one's field of study.  An internship may be part-time or full-time and is typically obtained after completion of a formal application and interview process.  The internship is a supervised discipline-related work experience and can be paid or unpaid.  Important elements structured into the experience, which distinguish it from short-term or volunteer work include: 1) an intentional experiential learning strategy, 2) an emphasis on professional development, 3) performance assessments, and 4) reflection and acknowledgement.

*ISIS:*  The Integrated Student Information System is a university-wide, web-based information system that manages records for all students and maintains records including: admissions, academic progress, graduation status, billing, course scheduling, student aid,

and transcripts.  Access is granted to specific users such as academic advisors and selected administration.

*JobNet:*  The on-line career management system used by undergraduate Schumann business students in order to apply to jobs/internships as well as to track professional development and job application activity.

*OCR:*  On-campus recruiting.  Employers visit campus to conduct formal interviews for internships and full-time jobs.

*PDAE:*  Professional development activity engagement.

*PDC'd:*  Referencing the acronym for the Professional Development Center, the term "PDC'd" is used when a student completes all three mandatory requirements for participation in recruitment activities (applying to jobs, attending recruiter events, etc.). These requirements include completion of:  PDC orientation, resume development workshop, and resume critique.

*Professional Development:*  Career-related preparation of students for entry into the professional business environment.  This is accomplished through professional development workshops, mentoring, student professional organization involvement, and internships that complement the content knowledge taught in the classroom.  Special

areas of emphasis include: personal development, career/industry awareness and impression management.

*Professional Development Center (PDC):*  A formal center dedicated to overseeing the professional development activities for undergraduate business majors at the Schumann School of Business.

*SBEM:*  Student behavioral engagement measures.

*SSSS:*  Senior Student Satisfaction Survey – The mandatory survey administered to all graduating seniors during fall, spring and summer semesters.

*Student Professional Organization (SPO):*  A SPO assists students in exploring their career options, networking with industry members, and building social connections. Each major is represented by at least one student organization that connects students with fellow students who possess similar career interests as well as faculty in one's discipline. These organizations — many nationally recognized for excellence — also provide networking opportunities with successful alumni and executives.

**E.  Delimitations and Limitations of this Study**

Delimitations:  The goal of this study was to develop an understanding of the variation in engagement levels of Schumann School undergraduate business students. The study was based on responses to the "senior survey" administered to graduating

seniors within this one business school, specifically where an integrated professional development program exists.  The results will not be generalizable to all undergraduate business programs, non-business undergraduate students, graduate business students or student job seekers served by traditional non-mandatory career service operations.  In addition, the use of one site will not allow multi-case comparisons.  This study will be based on the graduating class of 2011 and will not encompass multiple academic years and graduating classes.

Limitations:  The Schuman School of Business was chosen because the researcher is employed at Schumann and directly manages the professional development education/initiatives for the undergraduate students.   Also, the PDC is a unique program that is not available at other institutions within the region, hence the reason for conducting the study at Schumann.  Finally, this decision was not simply based on convenience, but was chosen since engagement has recently been a focus of Schumann's senior administration.

In order to identify a substantial sample reflective of the undergraduate population at the Schumann School of Business (different ages, majors, ethnic backgrounds, transfer status, campuses, etc.), the mandatory senior student satisfaction survey (SSSS) was selected for analysis.  Historically, the SSSS has a 98-99% completion rate.  Despite the compulsory nature, approximately one percent will not complete the survey.  Whereas this percentage is very small, this unresponsive group might be of particular interest when trying to understand engagement.

In addition, the SSSS is not solely focused on professional development.  The majority of the 32 survey items deal with general satisfaction with the curriculum and student services; however, four "professional development" questions were created by the researcher and approved for inclusion in the survey.  A separate survey dedicated to engagement in professional development was proposed, but was rejected in lieu of partnering with an existing survey that nets a 98-99% response rate.   Students encounter multiple surveys throughout the year and therefore introducing a "new" survey did not appear to be the most effective approach.

**F.  Significance of the Study**

This study explored the student, college, organizational and motivational drivers that serve as potential initiators of variance in engagement levels.  This will aid in closing the gap of available knowledge as to why certain types of students are more predisposed to engagement than their peers.  This information will assist the staff of the PDC/Schumann School to determine the factors (or combination of) that affect participation in professional development activity.  By developing an understanding of what factors (or combination of) correlate with engagement in professional development activity, the staff can identify those students who are less likely to fully utilize the available resources and therefore craft relevant strategies to increase motivation to participate.  These students might need additional attention compared to the highly "self-motivated" student.

The above could then lead to better preparation of students for the world of work. Increasing participation in professional development activity should help students become more viable candidates for post-graduate employment. Increased placement levels translate well into improved business school rankings and consequently enhance the school's reputation.

Despite generalization limitations, the data gained from this study might also be useful to comparable university career centers looking to enhance the employability of their graduates. Since most of these career units function on a voluntary participation model (as compared to the "required" professional development curriculum in the Schumann School), these organizations face additional challenges of attracting students to take advantage of their services. A better understanding of why students are inclined to participate will be useful in creating strategies to attract new students and maintain optimal participation of current users.

## G. Literature Base

Three foundations were used for this for this study and consisted of 1) the historical perspectives of vocational/career counseling and career centers, 2) career centers as a concept including theoretical paradigms and 3) student engagement theory.

A review of the historical aspects of career development in U.S. higher education is important in order to identify the social, economic and technological factors that have shaped current career-related initiatives. This chronological view will aid in the

understanding of how world events impact employment opportunities (and subsequent unemployment rates) and how institutions, organizations and government agencies react by creating relevant assistance programs and theoretical models. These key events resulted in the need for employment related assistance and consequently the field of vocational counseling was born.

Since the Professional Development Center referenced in this study is a relatively new concept and has not been well researched, an analogous collegiate resource, the career center, was used. In this case, professional development centers are an extension of the traditional university career center and extend beyond career counseling with an emphasis on polish, professionalism, soft skill development, and business ethics of the job search. The common element of the two organizations is the mission to prepare students for life after graduations, specifically in terms of finding employment. This commonality allowed the use of the career center as a concept in trying to understand engagement in professional development. Whereas a moderate amount of *research-intensive* literature exists about career centers, ample *practitioner* information is available on various career development models as well as changing paradigms. This literature unfortunately does not focus on undergraduate business majors, but takes a more generic approach to career services programming and delivery.

Since this study dealt with student engagement, it was appropriate to look at student engagement theory. The fundamental idea supporting student engagement is that a combination of psychological and behavioral components operates in unison to drive

students to invest in their learning. Underlying student engagement theory is the notion that students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks. This theory has its origin in the work of Vincent Tinto and Alexander Astin.

Student engagement theory addresses two components. The first looks at "time and effort" expended by students in terms of their studies and other "educationally purposeful activities." The second facet relates to the student's institution and its efforts to design and implement services, resources and programming to "induce" students to participate in activities that lead to persistence, satisfaction and learning. This intersection of student behavior and institutional conditions is considered student engagement.

In light of the above, there is a complicated set of factors working together to impact students and success rates. Since success, persistence and engagement is a complex phenomenon, an additional theoretical perspective that will be taken into consideration relates to the organizational aspect of institutional performance, or organizational theory. The organizational perspective looks at institutional structures and processes that are thought to affect student performance. For example, in the Schumann case, if the student views the university's commitment to professional development as worthwhile and relevant, and consequently makes professional development an integral part of their collegiate experience, the students will be likely to form positive perceptions of how the school proactively impacted their quest for meaningful employment upon

graduation. This will in turn, affect their desire to engage in the services offered as well as increase their satisfaction with the institution.

When assessing organizational culture, the policies and procedures associated with the operation of the Professional Development Center (PDC) will impact students' perceptions of the organization. These administrative features coupled with the responsiveness of administrators and staff to meet students' needs for job search assistance will also shape their impressions. A strong customer service orientation, user-friendly procedures, and a sense of responsiveness may affect a student's level of engagement. Will Schumann Business School's unique integration of professional development into the four-year curriculum (with a mandatory one-credit course) contribute to student engagement?

The rationale for selecting the above three literature frameworks was to provide a context for understanding the professional development initiatives within higher education and to possibly explain which variables (undergraduate business student demographics, college credentials and organization/motivation-related factors) relate to engagement levels. The focus of the literature review was on creating the context for this study since the current research is lacking with respect to correlating engagement theory, professional development of undergraduate business majors, and career services in higher education.

# CHAPTER 2

# REVIEW OF THE LITERATURE

## I. Historical Perspectives of Career/Vocational Counseling and Career Centers

Professional development can be considered to be a natural consequence of the higher education experience. The attainment of knowledge and skills gained through a college education contributes to personal growth and career advancement, and can encompass a variety of learning opportunities. Academics, as well as participation in activities outside the classroom play a role in students' professional development. It is an ongoing and extensive process. Formal university programs and auxiliary services dedicated to fostering professional development are recent additions to the collegiate offerings and actual centers dedicated to this function are becoming more common in U.S. business schools.

The Professional Development Center (PDC), the source of this study, is one example of this contemporary university resource. These centers are relatively new (within the last 10+ years) and are often viewed as an extension or outgrowth of the career services function. Rather than solely focus on academic preparation, some business schools are viewing "professional development" as important to preparation for life after graduation and in some cases have integrated a professional development component into their multi-year curriculum. Professional development goes beyond

traditional career service resources/services such as career counseling and job search strategies, and strives to differentiate undergraduates by taking a multi-faceted approach to student development with a focus on business savvy, professionalism, business etiquette, ethics, and soft skill development.

Since formal professional development centers are a new model, existing literature is sparse. The general concept of professional development has been the subject of research; however the focus has been on professional development for teaching/staff development, especially within the K-12 sector of academia. Academic research-based literature related to professional development of undergraduate business majors is practically non-existent. Given that professional development can be considered to be an outgrowth of the career services function, the topics of vocational/career counseling and career services were able to shed some light on the historical backgrounds of these units as well as the models for current career service operations.

Vocational/Career Guidance

Generally speaking, career services operations/units (and career planning or job placement specialists) utilize career choice and occupational development theories. These theories and practices have their origins in career counseling and vocational guidance. The research on this topic includes a segment of literature that has examined the various phases in the development of the career counseling field. The evolution of vocational guidance relates to the growth and development of the field of career services.

Pope (2000) identified six stages of career counseling in the United States and focused on these junctures from an organizational perspective. Based on changes in society, Pope created a "societal transitions stage model" to describe the development of the career counseling profession in the U.S. that includes the following: Stage 1: Job Placement Services; Stage 2: Educational Guidance in the Schools; Stage 3: College and Universities and the Training of Counselors; Stage 4: Meaningful Work and Organizational Career Development; Stage 5: Independent Practice Career Counseling and Outplacement Counseling; Stage 6: Focus on School-to-Job Transition, Internalization of Career Counseling, Multicultural Career Counseling and Use of Technology.

The career guidance movement has its origins at the turn of the 20th century. The first stage of career counseling in the U.S. occurred between 1890 and 1919 (Pope, 2000). The original term used was "vocational guidance." This name suggests providing assistance to individuals with choosing, preparing for, and making progress in occupations (Geisler, 2002). The growth and development of the United States caused changes in a number of areas leading to efforts to provide employment-related guidance. The key events that guided the birth of career counseling were increasing urbanization and job loss in the agriculture sector. These events, combined with demands for workers in industry, created a need for career advice and support. The return of World War I veterans, and their need to find suitable employment, also led to the need for career counseling. Historians described this movement as a "progressive social reform movement aimed at eradicating poverty and substandard living conditions spawned by

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the rapid industrialization and consequent migration of people to major urban centers at the turn of the 20<sup>th</sup> century" (Whitley, 1984, p.2).

This loss of "permanent jobs on the family farm" and demands for workers in industry translated into needs for job placement assistance. A social worker in Boston, Frank Parsons, created a "settlement house" for those who were unemployed or displaced during this era of societal change. These individuals were then "placed" into new jobs. Parson's work at that time (and its eventual application to the field of career services), led him to being considered the "Father" of career counseling. An element of practicality drove this stage rather than being guided by a solid theoretical foundation. "Simple logic and common sense" (Aubrey, 1977, p. 290) prompted Parsons to suggest that vocational choices are based on three elements. This guided his development of a three-part process that became the basis of the contemporary trait/factor theory of career development. First, an individual must develop a clear understating of one's skills, interests and values. Second, one must become aware of "requirements and conditions of success, advantages and disadvantages, compensations, opportunities, and prospects in different lines of work." Third, one must examine the relationships between the first two factors to produce the "best conditions of vocational success" (Parsons, 1909, p. 5). This intuitive-based perspective lead to the 1908 creation of the Vocation Bureau at the Civic Service House in Boston and was considered to be the first "institutionalization" of career counseling in the U.S. (Ginzberg, 1971).

It was during this first stage that an increase in use of psychological testing was noted. Rather than just rely on observation and intuition, psychological tests became an important component in the initial steps of "self-assessment" (the first phase of career counseling). This "scientific" approach helped career counseling to not only gain acceptance in the late 1800s but to be seen as respectable (Super & Crites, 1962; Whitely, 1984).

The progressive social reform movement also led to the initial support for vocational guidance. This was in light of the "growing exploitation and misuse of human beings" (Aubrey, 1977, p. 290). Efforts during this era to eliminate child labor (and the eventual passage of the Fair Labor Act in 1938) fueled the growth of career counseling and vocational guidance.

The second stage of career counseling (1920 – 1939) arose with the end of World War I and the economic depression of the 1930s. Collaborative efforts between education, social work and psychometrics supported vocational guidance for youth and adults (Super, 1955). The industrialization of the Unites States prompted the need for increased literacy, which in turn led to an increase in elementary and secondary education needs. The population increase resulting from the end of the war also contributed to the increase in students. Despite this "need," the growth of formalized career development programming in the schools was slow. Brewer (1942) states that as late as the 1930s, vocational programs were non-existent in almost 50% of U.S. cities with populations of 10,000.

This era of the economic depression saw the loss of jobs as well as the growth of organized labor. President Franklin Delano Roosevelt responded to this loss of employment and growing power of the unions with the creation of the New Deal. Organizations such as the Civilian Conservation Corps (CCC) in 1933 and the Works Progress Administration (1935) formed to provide training and sources of employment. Additional examples include the establishment/opening of the B'nai B'rith Vocational Service Bureau (1938) and the publication of the Dictionary of Occupational Titles (1939).

The third stage (1940 - 1959) of the development of career counseling directed resources toward colleges and universities and led to the training of professional counselors (Pope, 2000). The two major world events that led to this stage were World War II and USSR's rocket launches. As with WWI, jobs were lacking and the end of the war resulted in displacement of workers by returning veterans. The rise of USSR space initiatives "humbled American capitalism" (Pope, 2000, p. 199) and motivated federal legislators to explore how to improve Americans' performance in the areas of math and science. As a reaction, government determined a need for professionals to identify/encourage study in math and science at the college level and therefore, the Counseling and Guidance Training Institutes were established by NDEA to enhance counselor training.

Two social conditions during this era prompted an increase in professional counseling, especially career counseling: 1) veterans' personal/career issues and 2) the

creation of a more diverse student body with the influx of non-traditional students resulting from the GI Bill of Rights. This growth in vocational guidance, coupled with the benefits of collaboration, prompted the National Vocational Guidance Association (NVGA) to become a founding division of the American Personnel and Guidance Association (APGA), which was eventually renamed as the American Counseling Association in 1951.

The fourth stage (1960 – 1979) was a reaction to the idealism and hope sparked by John F. Kennedy's election, the Great Society - Lyndon Johnson's initiative to eliminate poverty and racial injustice, and civil rights movements. Young Americans had visions of growth and idealism and consequently sought "meaningful" jobs that would allow them to "change the world" (Pope, 2000, p. 200). These high expectations combined with the high unemployment rate (8.1%) led to federal legislation related to vocational education. A government panel report (1962) indicated school counselors must possess "exceptional understanding of the world of work and its complexities...a counselor who meets all of the requirements of a professional background in pupil personnel services and who at the same time is a specialist in occupational information, vocational guidance and counseling (U.S. Department of Health, Education and Welfare, 1963, p. 213). These recommendations became a part of the Vocational Act of 1963.

The fifth stage (1980 – 1989) did not see the growth and prosperity of the 60s but instead was characterized by a declining economy. The industrial era was being replaced by the age of technology. Here we see issues such as: job loss in the industrial sector,

employer demands for skills in technology, contract employment replacing permanent jobs, loss of job security and "retooling the economy for the information and technology age" (Pope, 2000, p. 202).

Private practice career counseling emerged and served as an indicator that career counseling was an "important service" to citizens. The profession grew and credentialing became widespread. Standards for the profession were created (the National Certified Career Counselor credentials) that specified "academic and experiential requirements." In addition, the National Career Counselor Examination was implemented.

In addition to the private practice arm of career counseling, "outplacement" emerged. Outplacement is a service provided by employers (to employees) who are downsizing their workforce. Outplacement counselors function to help these displaced employees find new employment outside the organization.

The rise of technology in this fifth stage led to federal legislation. The Omnibus Trade and Competiveness Act (1988) and the Carl D. Perkins Vocational Education Act (1984) were implemented to assist people to enter or advance in high-tech occupations. This included "pre-employment school training, school-to-work transition programs, and school-business partnerships" (Pope, 2000, p. 204).

The sixth stage (1990 to 2000) saw career counseling expanding in various directions serving a variety of constituents. Senior executives participated in

outplacement programs, disadvantaged people benefited from job assistance programs, schools benefitted from federal legislation, and career professionals developed specialties within their field.

The other notable aspect of this stage was the proliferation of technology. The Internet, email and cellular phones increased capabilities to interact with others in innovative ways. Services that required face-to-face encounters in the past could now be delivered via other mediums.

The School-to-Work Opportunities Act of 1994 sought to close the gap between the education and skills needed for the global economy and the knowledge/skills of students possessed by students exiting the U.S. Education system. This attempt to better align academic preparation with the needs of employing organizations is comparable to the goal of professional development of undergraduate business majors. The mission of current day career-related professional development initiatives within higher education is to prepare students for entry into the world of work. From this perspective, professional development attempts to align academics, career ambitions, business savvy and post-college employment.

Career Center History

The current career center has evolved over the years. Social, economic and cultural trends have transformed the profession similar to the field of career counseling as

outlined in the brief history of vocational guidance.  Consequently, college and university

career centers have their own history.


The origin of the career center as we know it today can be traced back to the late

1800s in Europe and the first career centers in the U.S. appeared in early part of this

century (Herr, Rayman, & Garis, 1993).  In the early 1900s, the task of assisting college

students with career planning was the responsibility of faculty.  Professors viewed

students as candidates to be mentored, groomed and guided into a promising profession

(Herr et al., 1993).  This faculty oversight of the transition of student to professional was

viewed as a "sponsorship."  In other words, students would enroll/focus on their

academics and faculty would take ownership of finding meaningful work for their

mentees.  This model was a manifestation of *in loco parentis* where faculty were "acting

on behalf" of the parents and were concerned with well-being of the student (Barr, 1993).

This faculty control of employment paths and destinations led to the term "placement."


The emphasis on placement continued.  The growth of the teaching profession in

the 1920s and 1930s translated to a need for employment assistance for teachers and saw

"placement" as a responsibility of teaching institutions during that era (Endicott, 1937).

This placement trend in the U.S. persisted and in 1924, the National Association of

Appointments Secretaries was established (Shingleton & Fitzpatrick, 1985).  This name

originated from the British equivalent of the term placement director (Giordini, 2005).

Eventually, college/university administrators took on the faculty role of "mentoring/sponsorships" and this led to the creation of placement centers. The goal was to provide all students with access to job opportunities instead of only those with a faculty mentor (Herr et al., 1993). The first recognized placement center was established at Yale University in 1919 (Teal & Herrick, 1962), but other institutions such as University of Nebraska, Harvard, John Hopkins and University of Chicago are credited with putting professionals in charge of students (Geisler, 2002).

In 1928, the National Association of Appointments Secretaries underwent a name change. It was initially changed to the National Association of Placement and Personnel Officers and in the 1930s was called the American College Personnel Association (NACE Journal, 2005). During this time, a more "placement related" association was desired and at MIT in 1926, the Eastern College Personnel Officers (ECPO) organization was established. The purpose was to provide professional development opportunities for members in the form of meetings, conventions, speaker-series and networking events.

The staff tasked with the placement function were trained in vocational guidance (Teal & Herrick, 1962) and Parson's 3-part Trait/Factor Theory served as the theoretical foundation for the placement center. This theory suggests that people perform best when they are working in jobs that are best suited to their abilities. Development of an understanding of one's skills, interests, values and resources; increasing knowledge of opportunities within different fields, and the connection between these two areas is important. This three-part theory still governs most career center current practices.

The 1930s are connected with the creation of assessment tools in the areas of interest and aptitude. This initiative gave credibility to the field of career/vocational guidance, but the poor economy during this time negatively impacted the availability of jobs. The Depression and crash of the Stock Market contributed to one of the lowest employment rates in U.S. history (Kroll & Rentz, 1996).

After World War II, the influx of veterans necessitated that higher education institutions expand the role of placement offices to "connect" veteran graduates with employers. The need for placement assistance only grew after the passage of the 1944 Servicemen's Readjustment Act (G.I. Bill of Rights). Many returning service members were taking advantage of this opportunity to obtain a college degree. This meant a sharp increase in the number of college graduates, 186,500 in 1940 to 432,058 in 1950, a 132% increase. Consequently, there was a need for colleges and universities to establish offices to "channel requests to fill positions and set-up on-campus interviews" (NACE Journal, 2005, p. 16).

The perceived need for "placement" continued with the competitive employment market of the 1960s combined with an increase in college graduates. The 1960s saw a spike in college enrollments and post WWII expansion slowed. This translated to a surplus of college grads. The changes in economy combined with philosophical changes – specifically the decline of the *in loco parentis* philosophy, started to lead the profession in a different direction.

In 1965 Stevens saw a change in the philosophical orientations among career

service professionals.  The placement director's role appeared to be moving away from

an employment service and gravitating toward being a functional component of the

"educational process of the total college program" (Stevens, 1985, p. 233).  The term

placement did not accurately reflect the new mission of career services offices/centers.

Powell and Kirts (1980), described how the field was transforming and growing to meet

the "changing needs of students."  They believed the term placement was "vague,

misleading, restrictive and implies selection of a job for a graduate" (p. 5).  The current

view of this era was that finding jobs was not the responsibility of the career center.  This

change in philosophy emphasized a desire/need to provide services and resources for

students to learn how to seek and obtain employment for themselves rather than

"placing" them.  This translated into the college career office becoming an "integral part

of the educational mission of the college" (Wessell, 1998, p., 164).


The above change in philosophical orientation led to the provision of additional

and more varied services.  Here we see the introduction of career "planning" which

included career information, job search skills, and cooperative/experiential education

programs.  These new functions became a focal point for career service providers

(Babbush, Bormann, Nance, & Thronson, 1982).  The result was a "new and improved"

college placement office.  It should be noted however, this change was not met without

resistance.  Scott (1983) noted that the career planning and placement community was not

in complete alignment of the "principle thrust" of their work.  While many professionals

were embracing the new "empowerment" values, others retained their stance that encouraged students' "dependence" on the career unit.

Developmental theory guided this era. Higher education was now more interested in "developing" rather than "parenting" the student. This student development model represented the shift from "placement" to a career planning or career "development" model (Bishops, 1966). This development philosophy is an underlying theme in professional development activity at the college/university level. The goal is to provide students access to professional development services/resources that supplement their academic experiences. These professional development resources assist in shaping a more well-rounded student that is prepared for the business world both academically and professionally. The purpose of this study was to enhance the developmental process by assessing what demographic, organizational, and motivational factors correlate to engagement in professional development and then crafting relevant strategies to engage student in the process.

The planning model lasted from the 60s through the recession of the 70s and into the economic expansion of the 80s. Notions of planning, self-discovery, and self-assessment were consistent with a goal-oriented or "me" generation of the 70s and 80s. Career theory transitioned from Trait/Factor theory to more humanistic emphasis on counseling and application of student developmental theory. (Rentz & Saddlemire, 1988). Placement still had a role, but it was no longer the focal point.

By the mid 1980s, college/university career centers were thriving. "Fueled by the new-found optimism of the Reagan administration, together with enormous increases in defense spending that accompanied the Strategic Defense Initiative, the American economy was supercharged" (Rayman, 1993, p. 3). Entry-level employees in engineering, science and business were in demand and Fortune 500 companies eagerly sought out this "beginner" or entry-level talent. The strong economy coupled with the high demand for college graduates created an ideal situation for college career offices. This era was characterized by robust campus interview programs and increases in the number of career center staff. These events were perfect conditions to fuel a return to the "placement" philosophy. The slow but steady evolution that had been taking place from a job placement emphasis (the 1950s and 1960s), to a career planning and counseling emphasis (the 1970s and 1980s), was now retreating to the earlier modes of "placement" (Casella, 1990).

The impact of social and economic conditions continued to shape the profession. The economic downturn of the 90s was considered a white-collar recession (Cam Report, 1992b). In order to remain competitive, business and industry turned to downsizing their workforces. Efforts to make their organizations "lean" created a pool of qualified, but unemployed workers. The result was new college graduates competing with recently laid-off college-educated employees. Consequently, on-campus recruiting numbers dropped and an emphasis on career planning (vs. placement) was reborn.

Another factor impacting the employability of new college grads was an economic structural shift. In 1990, a service-based economy was replacing the manufacturing-based market. The number of "high-paying" jobs in the manufacturing industry had decreased. This translated to college graduates having to adjust their expectations downward. A focus on helping students to develop realistic career expectations became an important role of the career center of the 90s. Early career planning became essential and collaboration between academic advising and career development was needed to enact this "early" intervention strategy (Rayman, 1993).

The profession's reaction to this issue in the 1990s was described by Rayman in 1993. He stated that "the college placement office has evolved from a single-purpose administrative unit offering a narrow range of placement services to a comprehensive services center providing a complex array of career services to multiple constituent groups…The trend is inescapably toward greater size, increasing centralization, and a broader, more comprehensive mission" (p. 1). This was supported by Freeman (1994) who indicated that career centers should use innovation and imagination when modifying outdated systems/services to meet current realities. This is the direction that some colleges/universities are taking with the creation of "centers" for professional development. Seen as the next generation of career services, these centers are utilizing a new approach to preparing students for post-graduate life. This is accomplished by emphasizing personal development and professional/social skills that are intended to give students a competitive edge in the job search.

Lastly, the changing nature of the student body as described in Workforce 2000 resulted in a more diverse student body. Non-traditional students, disabled, and other special populations provided new challenges to the career center of the 1990s. Also, the increase of first-generation college students meant that this group might "have limited knowledge and experience dealing with the professional job search subculture and often need different, if not additional career development assistance" (Rayman, 1993, p. 6). A goal of current professional development initiatives is to help these types of students to be competitive with their peers who have been exposed to a familial history of higher education and already have support systems in place to assist in their navigation of the higher education experience.

As seen by this brief history, a variety of services represent the offerings of the traditional career center. Whereas they all are intended to be valuable tools, on-campus recruiting and job placement are usually the most visible functions (Rayman, 1993, p. 7). There is also a notion of accountability and the ultimate criterion in the minds of many of these student stakeholders is whether they are able to obtain a job after graduation (Feldman & Turnley, 1995). Often, students have perceptions of how the career office "should" serve them. Tuition-paying attendees (and often their parents) believe their institution "owes" them because they are a paying customer and the school should "place" or find them a job after graduation. Employment, when viewed as the end result of the higher education experience, draws public attention and consequentially focuses a spotlight on the career center's role in this process. The consumer mentality of many students (and their parents) makes some take a closer look at the return on their financial

investment.  Graduating seniors typically seek full-time permanent employment and often believe the career services office should guarantee them a job upon graduation (Scott, 1983).  "This unfortunate perception has its roots in an obsolete conception of career development and in a history of single-purpose placement offices designed principally to meet the job search needs of engineering and business students (Rayman, 1993, p. 7).

Despite this "visibility" of the placement function, other valuable functions exist in the current career center (e.g., career exploration, self-assessment/skill identification, career and interest testing, career research, etc.).  The wide variety and ever-changing needs of the today's students require career offices to update their services for providing a comprehensive array of resources/programs to serve a very diverse student population.  This, combined with the realization that a "career is not simply a job but rather a sequence of jobs held over the course of a lifetime," (Rayman, 1993, p. 7) should motivate regular review and assessment of an institution's career service offerings that impact not only students' current career endeavors, but their future career planning strategies as well.  It should also generate a new understanding of which configuration of career-related services will inspire and engage student users and foster effective career development leading to meaningful employment prospects.  This idea of engagement in career-related professional development was critical to this study and the goal was to develop an understanding of what drivers positively relate to engagement.  This knowledge will facilitate the creation and implementation of programming and resources that will motivate student participation.

**II. Career Center Theoretical Paradigms**

The current role of career services has been shaped by the changing needs of students as well as social, economic, and technological factors. Economic conditions have influenced job search outcomes and have affected students' needs for assistance. Generational differences have translated to changes in "perceived" needs and how those needs should be met. Simultaneously, students as well as parents are concerned about the return on their investment and see the attainment of a job as critical. In addition, staff and administration may have varying preferences/ideas as to how the unit should function. Furthermore, advances in technology have affected the way in which career centers provide services. These initiatives lend themselves to the 24/7 "immediate" service orientations sought by this generation. This translates to different missions at different institutions.

What we have seen as a result of history and varying perspectives is that paradigms for the career services profession have emerged. Economic, societal, and technological changes, as well as shifting philosophies, have prompted changes in the development, implementation and delivery of career-related services. The result is paradigms that have been used to describe the orientations of career centers.

This paradigm model creates a framework for career service professionals and higher education administrators to understand the profession's evolution. Despite surveys and summaries of "trends" within the profession, "there has not been a theoretical model explaining the paradigm shifts and their impact on the career services

and recruiting field" (Dey & Real, 2010, p. 32).  Casella (1990) was the first to create an "evolutionary roadmap" to describe service delivery.  His functional model described practitioners' perceptions as well as how programming/services were provided.  This includes "names" given to the centers as well as the theoretical orientations that influenced service delivery.  The resulting paradigms were:  job placement, career planning and career networking.  These three paradigms included fourteen dimensions (center's overall purpose; name; theoretical foundation; central rationale; main activity; services; environment; clients served; target population; external factors; staff identity; staff performance; hiring criterion; and location for activities).

In 1999, after studying the structure and delivery of career services from the 1940s to almost 2000, Youngblood, Nichols, Wilson identified eight dimensions as an adaptation of the Casella model.  They also renamed the paradigms as:  Reactive (1940s-1970s), Proactive (1980s-1995), and Interactive (1995-2000+).  This examination of the paradigm model continued with Dey and Real (2010).  Incorporating facets from both the Casella and Youngblood et al., models, the "new" paradigms consisted of:  Placement (40s & 50s); Planning (60s, 70s and 80s); Networking (90s); Social Networking (2000 - 2009); and Global Networking (2010 - 15).

This study attempted to identify correlates of student engagement in professional development.  What the literature review has shown is that the field of career services has transformed over the years and should continue to evolve.  This opens the door for an

additional paradigm that is relevant to the changing needs of today's business student: Professional Development.

Since the goal of most college/university graduates is to find meaningful and lucrative employment, the addition of a Professional Development paradigm makes sense. By serving as a supplement to the academic portion of the education experience, a professional development paradigm optimizes students' readiness for the world of work. This component fosters career progress while emphasizing business savvy, professionalism and the soft skills (i.e., teamwork, interpersonal and leadership skills, etc.) necessary to maintain a competitive edge in business and industry.

Casella's networking models suggest that students need to be active participants and should take ownership of their career development process. In other words, they need to engage. The networking paradigm "requires students to learn the process rather than just participate in the process, emphasizing self-help or self-reliance" (Kretovics, Honaker, & Kraning, 1999, p. 81). In a similar fashion, engagement necessitates making an investment in one's learning as well as utilizing resources. The professional development paradigm suggests that students demonstrate a proactive approach maximizing opportunities for professional growth in preparation for life after graduation. This behavioral form of engagement is manifested in a variety of activities that can include: early workshop attendance, involvement in a student professional organization, actively seeking out/participating in internships, attendance at career fairs, and utilization of alumni and employer networking events.

This professional development paradigm expands upon the traditional roles of the career center by re-defining the dimensions of overall purpose, philosophical orientation, and main activity/services. Whereas similar goals exist to those of the career center (self awareness; knowledge related to the world of work; process knowledge), the professional development paradigm incorporates business savvy, professionalism, communication and soft skill development.

## III. Student Engagement Theory

This segment of the literature review will provide background on the topic of student engagement and will provide a foundation for attempting to understand why certain students vary in their engagement levels. The existing literature is somewhat broad and typically addresses overall student engagement as it relates to retention. Retention is a complex issue that can be affected by various components of the educational experience. Specialized student services and resources may support/enhance retention efforts and can be viewed as contributing factors to these efforts. Literature on student engagement related to these specific retention components is lacking. Examples of these specialized initiatives may include academic support services, career services, or a newer addition to the educational landscape, professional development coaching. Research specifically on student engagement in professional development activity is extremely difficult to find, therefore, this literature review explores student engagement in a broad context with the intention of drawing connections to focus on possible drivers of professional development engagement.

Another limitation of the existing literature is that despite the numerous terms used to describe student engagement, the underlying "goal" of much of the research is identifying effective practices that foster student success in college students. In light of the large numbers of students that attend college annually, and the numbers of students that do not complete their post-secondary education, there is reason for concern. This is because of the insufficient amount of research that has been undertaken to isolate the specific factors/characteristics responsible for "why" some students do not persist and consequently become unsuccessful in their collegiate pursuits.

One of the questions of this study was how do demographic, organizational and motivational factors foster or hinder student engagement? These characteristics include: gender, age, ethnicity, transfer status, GPA and parental education level to name a few. Beside these student-related factors, additional factors may be involved. For example, what is the institution's role and/or what are the effects of organizational culture on student engagement? This can include specialized programming and services that may be unique to each institution. Other elements worth consideration are faculty interaction/mentoring, student expectations and motivation levels. In light of the multiple drivers that may influence student engagement in professional development activity, variable "sets" were used to categorize the potential drivers of engagement. This section will include an overview of student engagement literature relative to these variable sets.

The goal of this quantitative study was to develop an understanding of the drivers of undergraduate business students' engagement, specifically utilization of professional

development services.  This utilization was referred to as Professional Development

Activity Engagement (PDAE).   Since the drivers of engagement were organized into

variable sets, the literature on student engagement was categorized in this fashion as well:

1.  **Student Background:** This set consists of basic student information and
    includes age, gender, ethnicity and parental education.   This is non-reflective of
    student effort and cannot be influenced by student attitudes/behavior.

2.  **Pre-college Credentials:** This includes academically-related characteristics that
    manifest themselves prior to entering college: high school attended, high school
    grades; pre-college standardized test scores; entrance as a freshman, sophomore,
    junior or senior; transfer student status/transfer institution/grades.

3.  **College–related Factors:** This set includes academic components as well as
    living arrangements and the amount of time spent on schoolwork and
    employment.  These factors are more of an indicator of student effort (GPA,
    honors program participation, hours invested in work and school) and personal
    choices (campus attended and living on/off campus).

4.  **Organization-related Factors:** This variable set focuses on the institution (e.g.,
    quality of services provided and ease of access).  This set is beyond the control
    of the student, yet it might correlate to how a student perceives and reacts to the
    institution's services.  It can also impact student satisfaction levels with the
    institution.

5.  **Motivation, Expectations and Attraction:** This set addresses the unique
    combination of a student's motivation, values, and expectations of the
    institution.  This is the most unique set of variables and is anticipated to have

the greatest impact on how students engage in professional development activity. (Note: The original proposal included research on two additional components within this category: identity formation and personality characteristics. Whereas they may have relevance to a students's proclivity to engage, they were not addressed in the SSSS and therefore were not incorporated into the independent variables. For this reason, they were eliminated from this final literature review.

It was hypothesized that the above variables work in concert with each other and that certain factors may be more indicative of PDAE. Consequently, the above order was selected to suggest a distal to proximal flow with the expectation that the strongest antecedents are Students' motivation, expectations and attraction (#5), followed by Organization-related factors (#4), College-related factors (#3), Pre-college credentials (#2) and Student background characteristics (#1).

Overview of Student Engagement

It is believed that a significant outcome of most formal educational experiences involves student learning and personal development. An important component of these processes is student engagement, or the quality of effort students themselves devote to educationally purposeful activities that contribute directly to desired outcomes (Astin, 1993; Pascarella & Terenzini, 1991). Examples of these activities include time spent studying, faculty interaction, and utilization of institutional resources (Astin, 1993; Chickering & Reisser, 1993; Kuh, Schuh, Whitt & Associates, 1991; Pascarella & Terenzini, 1991).

Student engagement theory has its origin in the work of Vincent Tinto and Alexander Astin. Additional significant contributors include: George Kuh and Gary Pike. Over the years, a variety of terms have been used by researchers including: student engagement, student persistence, student involvement, and student departure, but the unifying concept is that students learn from doing (Pike & Kuh, 2005). For purposes of consistency in this empirical/quantitative study, the term student engagement was used.

A well known measure of student engagement is the *Seven Principles for Good Practice in Undergraduate Education* (Chickering & Gamson, 1987). These principles include: student-faculty contact, cooperation among students, active learning, prompt feedback, time on task, high expectations, and respect for diverse talents and ways of learning (Hu & Kuh, 2002). These principles positively relate to student satisfaction and achievement (Astin, 1985; 1993; Bruffee, 1993; Goodsell, Maher & Tinto, 1992; Johnson, Johnson & Smith, 1991; McKeachie, Pintrich, Lin, and Smith, 1986; Pike, 1993; Sorcinelli, 1991). The premise is that "educationally effective" institutions of higher education channel students' energies toward appropriate activities and engage them at a high level in these activities (Education Commission of the States, 1995; National Survey of Student Engagement, 2000). The university utilized in this quantitative study houses a business school that strives to augment the academic education by providing a focused professional development program that supports a strong, well-rounded undergraduate experience.

Rather than relying on anecdotal evidence or simply suggesting that effective educational practices "seem" to have a positive impact on student learning, there has been gradual development of empirically-based evidence. As mentioned, much of the research in this field has utilized the models of Tinto and Astin. According to these two particular models, college student engagement leads to student learning, retention, and a quality undergraduate experience. The central theme of Tinto's model was that students' decisions to persist or withdraw from college depend upon their successful academic and social integration within the college.

Tinto compares the acclimation to collegiate life to Van Gennep's (1960) anthropological model of cultural rites of passage. From this perspective, a student "separates" from their original group (i.e., family, high school peers) and then undergoes "a period of transition during which the person begins to interact in a way with the members of the new group into which membership is sought" (Tinto 1993, p. 93) and "incorporates or adopts the normative values and behaviors of the new group, or college" (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006, p. 11).

In addition to the above, the sociological perspective of Tinto's interactionalist theory suggests that academic and social integration into the new environment are complimentary but independent processes (Kuh et al., 2006). Academic integration addresses a sense of conformity with related norms (e.g., grades or academic values of the institution) while social integration relates to the ability of the student to acclimate to the social environment in a way this is consistent with his/her background, values and

aspirations (Kuh et al., 2006).  Consequently, this notion of student persistence is a

complex interaction of the both the individual as well as factors/players within the current

(collegiate) and former (high school/familial) environment.  This corresponds to the five

independent variables identified in this study: 1) Student Background (demographics); 2)

Pre-college Credentials; 3) College Credentials; 4) Organization-related Factors; 5)

Motivation, Expectations and Attraction.


Five Variables Sets Related to Student Engagement

**1. Engagement and Student Background:**

Research by Flacks and Thomas (1998) has suggested that a significant portion of

college students appear to be either "academically or socially disengaged."  At the

University of California at Santa Barbara, they noticed an emerging "culture of

disengagement."  This "state" was more evident among white students and students from

affluent backgrounds.  In a similar vein, Kuh, Hu, and Vesper (2000) found a substantial

number of students considered to be "disengaged."  Approximately 18% of 50,000

students at 128 colleges/universities scored significantly below average on the College

Student Experiences Questionnaire (CSEQ) scales related to efforts devoted to

educationally purposeful activities.


According to Hu and Kuh (2002), "relatively little is known about the

characteristics of students who are disposed toward engagement or institutional features

that are linked with disengagement" (p. 556).  Despite the identification of "good

educational practices" that correlate with engagement (National Survey of Student

Engagement, 2000-09), a solid understanding of "what" actually causes engagement is still being sought. This knowledge is critical for colleges and universities seeking to improve the overall quality of undergraduate education. Consequently "we must identify and better understand how student and institutional characteristics interact to encourage or discourage student engagement in educationally purposeful activities in college" (Hu & Kuh 2002, p. 556). This was precisely the direction undertaken by this study.

What Hu and Kuh (2002) were able to identify in their research was that "certain student background characteristics (sex, race and ethnicity), level of parental education, student academic preparation, years in college, major field, and perceptions of the college environment interact in complex ways to influence student engagement in educationally purposeful activities" (p. 569). This is consistent with the Flacks and Thomas study (1998) that noted a correlation between ethnicity and engagement. More specifically, they suggested that students from most racial/ethnic groups (other than Asian Americans) were more likely to be engaged than White students.

Contrary to some of the other findings of Flack's and Thomas's research, Hu and Kuh noted that parental education was positively correlated to student engagement and men were more likely than women to be disengaged. They found that strong academic preparation and longer periods of time in college typically led to higher engagement levels. The inconsistencies in these studies suggest that further research on the role of student characteristics (related to engagement) is warranted.

*Student Background & National Survey of Student Engagement (NSSE)*

Additional references to gender have been seen in the National Survey of Student

Engagement. The NSSE measures a series of qualities of student engagement that are

widely believed to correlate with learning. Launched in 1999 by Professor George Kuh

at Indiana University, NSSE is considered to have "clout" among college/university

presidents and student affairs experts (Jaschik, 2009). NSSE was created to measure

"student behaviors highly correlated with many desirable learning and personal

development outcomes of college" (Axelson & Flick, 2010, p. 40). Besides these

behaviors, the survey assesses institutional factors believed to promote learning.

The purpose of the survey (which focuses on freshman and seniors) is to assist 4-

year colleges and universities in identifying areas of weakness within their practices and

for administrators to determine the most effective approaches and techniques for making

modifications/improvements. This is accomplished by revealing certain ineffective

aspects of the college experience (including those that might be obscure), as well as

providing an opportunity for institutions to learn about practices at other schools. Many

schools take part on an annual basis with others participating every two years. The 2009

survey indicated that "41% of institutions showed positive gains in at least one measure

for first-year students and 28% saw gains for seniors" (Jaschik, 2009, para. 5).

A few elements of the results of the 2009 survey may have relevance for this

study. For example, "male students were less likely than female students to participate in

high impact practices" (Jaschik, 2009). This included learning communities, study

abroad and research with a faculty member. Also incorporated into this category was participation in internships. Specifically among seniors, (the group more likely to compete an internship), the male to female participation rates were 43% to 57%. One of the factors explored in this PDAE study was the impact of gender on engagement levels in professional development activity. This includes the pursuance of an internship or co-op experience.

*Engaging Diverse Populations*

Since the role of gender and ethnicity (related to student engagement) was being explored in this study, it is relevant to briefly review literature related to engagement of varied student groups. Research has typically concentrated on the role of the college/university in creating environments that foster engagement. According to Pascarella, "An excellent undergraduate education is most likely to occur at those colleges and universities that maximize good practices and enhance students' academic and social engagement" (2001, p. 22). Consequently, faculty and administrators are encouraged to view the engagement of diverse populations as everyone's responsibility. Creating optimal learning environments to ensure all students feel connected is challenging, but necessary. For engagement to occur in intellectually and culturally responsive ways, faculty and staff need to learn and understand the theoretical foundations and practices needed in different types of institutions and when working with diverse student populations.

The reality of the higher education experience is that most educational programs and services are offered "in bulk." Unless we are looking at a private tutoring session, an

individual appointment with an advisor, or a one-on-one encounter between a student and his/her faculty member, most academic and student support services are delivered to multiple students in a group format. This is simply the most efficient way to address numerous students simultaneously. Familiar examples of this include traditional class structures with one faculty member and group orientations/workshops with one facilitator. The rationale behind this format is the hopeful expectation that provision of information to the group will produce the same or similar results amongst all attendees/participants. The unfortunate reality is that this is not the case. It should be no surprise that despite the fact that the same information is presented to all the students in the room, the ways in which each student absorbs and processes this information will vary. Imagine 75 students attending a professional development center orientation session. Is it realistic that all 75 students will immediately flock to the center to take advantage of the resources mentioned in the orientation? Of those that do decide to visit to learn more, how many will continue to avail themselves to the services after that initial visit? Who will become a regular visitor, who will become an occasional user and who will become apathetic?

"A dependency on sameness is no longer appropriate, as contemporary cohorts of students at colleges and universities are different; the ways they experience and respond to our campuses are varied" (Harper & Quaye, 2009, p. 1). Consequently, the saying "one size does not fit all" has taken on new meaning. As a result, faculty and staff must be mindful of the variances in their student populations and consider ways to foster

conditions that will motivate multiple personas to make the most out of college.  This includes participaiton in extraculicular activities and student support services.

Many researchers and practitioners believe there are two aspects of student engagement.  The first is the amount of time and effort expended by students into their academics and other educationally purposeful activities.  The second is how the institution "deploys its resources and organizes the curriculum, other learning opportunities, and support services to induce students to participate in activities that lead to the experiences and desired outcomes such as persistence, satisfaction, learning and graduation" (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007, p. 44).  Empirical evidence has shown that creating strategies to increase engagement is a worthwhile endeavor.  The question becomes how do we increase engagement within diverse populations and especially among those for whom engagement is more challenging?

Identifying the perfect formula for ideal learning environments that foster a sense of connectivity and engagement is not a simple endeavor.  In order to accomplish this, educators should have the skills and expertise needed to analyze campus environments to identify where gaps in engagement exist.  In addition, "they must resist the urge to act without considering the effects of potential solutions and instead, must spend time understanding the obstacles facing disengaged students" (Harper & Quaye, 2009, p. 8).  To accomplish this, educators should solicit feedback from students to learn what factors are important in encouraging engagement.  Institutions should create mechanisms to

listen to students, consult with them, explore their opinions, and document the nature and quality of their experience as learners (ACPA & NASPA, 2004).

If student background is identified as a driver of engagement, what are the recommendations for dealing with these diverse populations?  Should discrete approaches be used for differences in gender, sexual orientation, socioeconomic status, and racial/ethnic minorities?  Probably not, but each of these categories can be considered *identities* that are integral to *identity development* in college students.  One definition of identity is "the interface between the individual and the world, defining as it does what the individual will stand for and be recognized as" (Josselson, 1987, p. 8).  Since the above impacts identity development, how does it affect students' tendencies to become engaged?   Harper and Quaye began by looking at both male and female identity development issues and the differing challenges experienced by males and females. Some examples of differences include the notion that females may be more susceptible to eating disorders and/or focus on careers that are "traditional."  Male students may be pressured by idealized images of masculinity and may be less likely to seek out help. The recommendation is that educators pay attention to how institutional culture might affect gender identity issues and to design and implement strategies to support students during this gender identity formation process.

Besides gender, Harper and Quaye address additional "identities" and suggest strategies for engagement.  For example, in the case of racial/ethnic differences, a multi-faceted approach is needed to engage racial/ethnic minority students in predominantly

white environments. Their recommended interventions are divided into four categories: assessment, student success, faculty success and culturally responsive curricular strategies. Within the student success category, recommendations include peer networks, collaborative learning, validation of race/ethnicity and connection of personal experiences to academic content. The suggestions are further divided by classroom and out-of-classroom experiences. The discussion continues with a look at engaging minority students on a multi-cultural campus. A consistent theme is that student affairs educators need to constantly evaluate their programs to ensure inclusion of all learners to promote students' healthy development (Harper & Quaye, 2009). This study sought to offer insight into if it is necessary for the the Professional Development Center (PDC) to modify their programming to promote engagement with distinct groups.

The discourse continues with low-income and first-generation college students. Isolation, placement in developmental courses, and a lack of familial support are possible issues that may be encountered. These obstacles can impact access, engagement, personal development and academic performance. Consequently, specific engagement strategies for this group might be effective as well.

The above examples serve as a brief mention of some of the variations within the student population that should be considered when designing and delivering students' educational services and programming. The intent of including this in this review was not to delve into the specific strategies outlined by Harper and Quaye, but to provide support for the hypotheses that student background characteristics may influence their

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proclivity to engage in professional development activity. These student characteristics were measured in this PDAE quantitative research study to determine what students' background characteristics (i.e., age, gender, race/ethnicity, and parental education) and experiences (e.g., quality student service delivery, faculty involvement) foster or hinder student engagement. The study explored the possible relationship between these factors and the variance in undergraduate business student engagement levels related to the PDC services and resources. The focus was on what are the drivers of engagement in professional development activity by searching for PDC "usage patterns" within the populations described above.

## 2. Pre-College Credentials Variable Set

Do pre-colleges grades, SAT scores and entering status (freshman versus transfer) impact college performance? Hu and Kuh (2002) suggested that student academic preparation, the amount of time spent in college, a student's major, and perceptions of the college environment interact with other factors (such as student background) to influence student engagement in "educationally purposeful activities" (p. 569). They found that strong academic preparation and longer periods of time in college typically led to higher engagement levels. College success is thought to be related to pre-college academics as well as other factors (Kuh et al., 2007). Students who perform below grade-level proficiency in math and reading by eighth grade are less likely to be "college-ready" by the time they complete high school. This translates to possible difficulties in successfully completing a bachelor's degree despite interventions. This supports the rationale for including pre-college academic credentials into this study.

Entering status was a factor in the 2009 NSSE Survey that addressed participation in internships.  More specifically, the survey compared the experiences of transfer students to students who started/completed their education at the same institution. Participation rates for seniors in internships showed some interesting findings.  Those students who never transferred had a 62% participation rate; students who transferred from a 4-year college had a 49% rate and those who transferred from a community college demonstrated a 43% participation rate.  Transfer status is one of the thirty independent variables and falls into the "pre-college" credentials category.

Transfer students are often referred to as "non-traditional" and deal with distinct issues that most "traditional" students do not have to face.  This group unfortunately has a shorter time to acclimate themselves to their new environment and to engage in campus experiences (Laanan, 2001).  The heterogeneous composition of this population contributes to the complexity of understanding their unique needs and issues.  Transfer students can be older, members of underrepresented racial-ethnic groups, and attend part-time (NSSE, 2011).  Besides the diversity of this population, family and work obligations further complicate their situation.  These commitments combined with spending time traveling to and from campus detract from available time for extracurricular activity.

## 3.  College-Related Variable Set

How does being a part-time commuter, or returning student factor into the engagement equation?  Historically, these groups have been thought to be underserved in comparision to traditional full-time students.  Commuter students are a growing group at

many schools; therefore it is important to take note of their unique challenges as many of them view campus as a place to simply "visit." Their varying life circumstances create distinctions between them and residential students (Jacoby & Garland, 2005). The multiple roles commuters play can interfere with their ability to fully utilize campus resources such as the PDC. Research has also shown that traditional full-time residential students develop a stronger sense of engagement and community than commuter, part-time, and returning students. Increased family obligations, multiple life roles, traveling to/from campus, and lack of familiarity with campus services are some of the issues that affect this group (Banning & Hughes, 1986, Jacoby, 2006b).

As with gender and racial/ethnic differences, educators need to understand the circumstances faced by these students and explore specific strategies to engage this population. Part-time and full-time standing as well as residential/commuter status are included in the independent variables.

*The Role of Internships/Working to Student Engagement*

The attempt to develop an understanding of persistence, involvement and engagement is important because it is postulated that involvement in "educationally purposeful activities" has desirable effects on student learning and success during college (Astin, 1977, 1993; Feldman & Newcomb, 1969; Kuh, Pace, & Vesper, 1997; Pace, 1990; Pascarella & Terenzini, 1991). From this perspective, an appreciation of and/or a commitment to professional development and participation in internships can be viewed

as "educationally purposeful activities" with desirable effects.  Internship activity was one of the dependent variables in this study.

What is the role of work/employment to this PDAE study and to student engagement?  Many students work while in school to defray the costs of their education.  This is considered the norm in American higher education (Pike, Kuh & Massa-McKinley, 2008).  According to the National Association of Student Personnel Administrators (2008), 68% of college students work during the academic year and one-third work 20+ hours per week.  Could this be detrimental to student engagement?  Many believe that the time spent working detracts from the time spent studying or engaging in "educationally purposeful activities."  The number of hours worked/week are included in the independent variables.

Often times, these work experiences are unrelated to a student's major.   Does this further infringe upon the energy expended on "educationally purposeful activities?"  Is this a concern for those educators who are trying to increase engagement levels?  Luckily (or unluckily depending on one's perspective), research has not found a consistent relationship between work and grades.  Pike et al., (2008) believe that "there is not a simple linear relationship between working for pay and academic performance" (p. 561).  In other words, they suggest that grades may actually improve with part-time employment; however, grades may decrease as the number of hours worked increases.  It is also speculated that the location of the work experience may influence grades (on-campus versus off-campus).

Does the nature of the work make a difference? It is believed that "the key to successful career management is the development of a clear self-identity, and then the setting of career goals and the pursuit of career strategies that are consistent with that identity" (Callanan, 2003, p. 130). Internships can certainly assist in this endeavor. If the student's job is an internship/co-op and it connects the theory learned in the classroom with the world of work, then it might be speculated that this could actually help increase levels of student engagement. Furthermore, if the internship was obtained through the students' utilization of the resources/services provided by the college or university, this may further strengthen their level of engagement and involvement with the school. Since the Pike et al., study (2008, p. 576) suggests that "first-year students' work experiences are directly related to grades in college," educators should be concerned with positive and negative effects of working. Based on the results, students should not be encouraged to work more than 20 hours per week in light of the potential negative impact on grades. Positive effects of working less than 20 hours is considered an important "overall strategy designed to foster student achievement and success" (Pike et al., 2008, p. 577). These findings suggest that educators who are interested in success should assist students to become "engaged in activities that encourage active and collaborative learning and foster positive interactions between students and faculty members" (Pike et al., 2008, p. 578). Internships are an example of one such activity. Is it also suggested that campus leaders "intentionally design" these active and collaborative learning experiences. The Schumann School PDC is an example of this "intentional design" strategy. Full utilization of the Center's resources can positively impact students' searches to find internship employment within their field of study.

**4. Organization-Related Variable Set**

By measuring student engagement, as well as other critical factors, institutions of higher education assess student outcomes and institutional performance (Kuh, 2005). The results of such measurements can be used to address strengths or weaknesses that can affect the caliber of students' experiences. From the perspective of this study, full engagement in the professional development training and services that have been integrated into the Schumann School of Business undergraduate curriculum, is believed to contribute to the success of its graduates.

*Institutional/Organizational Factors and Student Engagement*

Student engagement is a term related to the extent in which students participate in educationally effective practices. Consequently, it is often associated with student as well as institutional performance. Student engagement is a "domain of constructs that measures both the time and energy students devote to educationally purposeful activities and how students perceive different facets of the institutional environment that facilitate and support their learning" (Gonyea, 2006, p. 2).

In light of the positive relationship between engagement and "positive educational outcomes," Astin (1985, p. 36) argued that "the effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement." From this perspective, organizational theory comes into play concerning how the design and implementation of policies/procedures within the PDC affects student engagement.

In order to "incorporate" professional development into the four-year program of study at the Schumann School of Business, a one-credit course was added to the undergraduate curriculum. The "mandatory" nature of this professional development course at the Schumann School "forces" student participation at some point in their academic career (even though most students take the course in their junior and senior year). In addition, in order to apply for internships, being "PDC'd" is necessary (corresponds to the Professional Development Center – PDC acronym). This entails the completion of a three-step process to receive the "PDC'd" status. Until that is attained, students cannot attend formal PDC employer networking events requiring the PDC'd status. This compulsory nature might be reminiscent of classical organizational theory. Considered a combination of scientific management, bureaucratic and administrative theories, classical organization theory evolved during the early 1900s. Building upon Frederic Taylor's scientific management theory, classical organizational theory provided a framework for organizational structure. The premise of scientific management is that tasks are best accomplished by a methodical or "best way" process. Close supervision of workers with a reward/punishment system along with management philosophy of "planning and control" serves as the foundation of organizational theory (Walonick, 1993). Looking at the operations of the PDC from this perspective highlights the elements of "control" the Center maintains over the students. The reason behind these mandatory processes is founded in the best interests of its student users. As with the workers in Taylor's industrialized companies, some students do not question the process, while others ignore the importance, and some may even challenge the rigidity. As this study sheds light on the correlates of student engagement, the goal was to develop an

understanding of how the rigid (but purposeful) organizational structure of the professional development program affects students' desire and motivation to participate.

Another "process" oriented feature of the PDC/Schumann School of Business is the timing of when students must take the mandatory one-credit professional development course. Even though this course would be ideal for sophomores, the intensity of the business curriculum often necessitates students delaying their registration for the course until their senior year. If it was required for the course to be taken at a lower level, perhaps engagement with the PDC might become more consistent.

Besides the "mandatory" components of the PDC, are there other elements of the professional development program that affect student participation? For example, does the organizational climate or customer service attitude of the staff support/discourage students' participation? What about the reputation of the PDC? If faculty praise the Center in front of students, will students be more likely to utilize the services? Does the culture of the business school play a role? It has been suggested that the design and implementation of "quality" programs (i.e., orientation, first-year seminars, learning communities, intrusive advising, on-campus work and internships) are critical (Forest, 1985, Kuh et al., 2005; Kuh et al., 2007; Wang & Grimes, 2001). Consequently, the above questions suggest that "simply offering such programs and practices does not guarantee that they will have the intended effects on student success; institutional programs and practices must be of high quality, customized to meet the needs of all students they are intended to reach, and firmly rooted in a student success-oriented

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campus culture" (Kuh, Cruce, Shoup, Kinzie and Gonyea, 2008, p. 556). According to

Braxton and McClendon, 2001-02; Kuh et al., 2005; Kuh et al., 2007, efforts by staff

(advisors, counselors and others) to encourage students "to persuade or otherwise induce

them to get involved in relevant activities related to learning and development" are

important (Kuh et al., 2008, p. 557).


Studies have shown that patterns of engagement at national and local levels have

emerged, although sweeping generalizations cannot be made. Factors such as institution

type, institution size and student population need to be considered. For example, smaller

schools have a tendency to engage students more effectively, but this is not true in all

cases. Consequently, additional information about each particular institution is needed

and one cannot assume that all colleges/universities are equal. Detailed information

about the Schumann School of Business and the PDC will be important when considering

if the PDAE study results may have any relevance to other institutions.


*Career Development Programming and Student Engagement*

What is considered to be an example of an organization's effectual educational

practice? Does "professional development" training and coaching fall into this category?

According to research by Kenny, Blustein, Haase, Jackson and Perry (2006), career

development programming "has been identified as one means for positively enhancing

student attitudes toward school and increasing student engagement" (p. 273). One such

example is the 1994 School-To-Work Opportunities Act (STWOA). Although this is not

based on post-secondary education attendees, there has been evidence that these K-12

career development programs can enhance academic achievement (Kenny et al., 2006). Even though the results were not dramatic, Evans and Burck (1992) found career education to have a positive impact on school achievement. In 2001, Lapan, Gysbers, and Petroski found that comprehensive guidance programs led to better grades with students viewing school as "more relevant." These programs are examples of organizational efforts to positively impact students's lives.

How does the above relate to post-secondary education? Even though researchers (Blustein et al., 2000; Lapan, 2004; Solberg, Howard, Blustein, & Close, 2002) have suggested that "theoretically driven research has not yet examined the central conceptual premise that school motivation and engagement are linked to an understanding of the importance of school for future career success" (Kenny, 2006, p. 273), is it reasonable to suggest similar correlations may exist with college/university students; however, further work in this area is warranted, especially with higher education populations.

One possible theoretical perspective to consider is life career development theory (Gysbers, Heppner, & Johnson, 1998; Lapan, 2004). This framework seeks to explain the benefits resulting from participation in career development programming. Another attempt to rationalize the connection was undertaken by Lapan in 2004 where he suggested that an "adaptive vocational self understanding, characterized by vocational planfulness and positive career expectations, can bring a sense of purpose, opportunity, and choice to youth who otherwise might feel academically discouraged" (Kenny et al., 2006, p. 273).

*Professional Development of Business Students*

Traditionally, business schools have focused their attention on academic training rather than professional preparation of students (Cunningham, 1995). This is in comparison to schools of education and professional schools. In the past, emphasis had been placed on the "development of specific skills and competencies in the classroom rather than the supervision of skills in an applied setting or the development of social skills and professional character through mentoring" (Schlee, 2000, p. 323). More recently, efforts to prepare business students both academically and professionally have been undertaken. The Association for the Advancement of Collegiate Schools of Business (AACSB) has recommended the implementation of programming to counteract the "lack of real-world business contact." Such programs would increase contact between business schools and the business community with the intention of augmenting the educational experience of business students and increasing the value of the business degree. This contact can be manifested in the Student Professional Organization involvement strongly encouraged by Schumann's PDC.

As a result of AACSB's recommendations, Bigelow (1995) states "business schools are beginning to incorporate professional practice skills and managerial skills into business training" (Schlee, 2000, p. 324). The goal of this training/coaching includes development of skills in the areas of communication, networking, leadership, goal setting, business etiquette and ethics. This PDAE study highlights one such program. The Professional Development Center or PDC was created by senior administration in the business school at a large, urban research institution. In accordance with AACSB

recommendations to "connect" students with the business community, the PDC is built around a model emphasizing involvement with one of the 24+ student professional organizations. These organizations facilitate networking opportunities with local and regional business partners. This program is integrated into the four-year curriculum and includes mandatory participation in a credit-bearing professional development course. The goal of the PDC is to enhance the educational experiences of undergraduate business majors, but despite the support of administration, faculty and staff, wholehearted student engagement levels vary.

*Strategic Organizational Efforts to Increase Student Engagement*

Research on student engagement explores the role/impact of programs, services and initiatives aimed *at* the student. The foundation of these factors is based on building and maintaining climates or environments that promote educationally purposeful student behavior. This philosophy is explored further in a study by Kuh, Schuh, and Whitt (1991) that sheds light on fourteen institutions that have been able to create these types of atmospheres and environments. This group of college and universities provided unusually rich out-of-class learning experiences for their students. Identified as "Involving Colleges," these institutions exhibited properties that worked together in multiple ways toward different goals that were dependent upon the mission, size, location and student characteristics of that institution. Despite the variances, three common factors (that influenced students to participate) were present. This included: 1) A coherent and transparent philosophy that sets expectations for student behavior and guides the creation/implementation of campus policies and procedures; 2) The presence

of a campus culture embracing student participation and loyalty; and 3) a faculty/staff

commitment to student learning that values out-of-class learning experiences.


An "Involving College's" mission drives the expectations for student behavior

both in and out of the classroom.  This is fostered by socialization during recruitment that

entails new students receiving ample information about the expectations.  An example of

a practice at one of the "Involving Colleges" (Stanford University) was to send fifteen

mailings to incoming students describing Stanford's philosophy that students should act

as responsible adults exercising good judgment and making one's own choices.  This is

followed by orientation activities that indoctrinate the student to the school's philosophy.

An application of this practice at the Schumann School of Business took place in August

2010 and consisted of similar pre-arrival correspondences, including information about

the Professional Development Center.  This described how the Dean created the PDC to

differentiate Schumann Business School undergraduates from their peers (at other

institutions) because of the competitive edge professional development training is likely

to provide.  The benefit of engagement was supported by additional messages from

faculty, staff and students by strongly emphasizing the importance of active participation

in the program.


Besides this approach at Stanford, other philosophical orientations at the other

institutions prevailed (e.g., commitment to multiculturalism, egalitarianism, traditions,

language, symbols, etc.), but transparency in how the institutions valued their "way of

life" was the common thread.  This study on "Involving Colleges" highlights examples of

how a number of institutions have been successful in invoking the desired student behaviors that result in student learning and engagement. Whereas these examples are wonderful models to consider, the lingering question revolves around "how" each student might react differently to the intended message. An incoming class might receive the same information, be exposed to the same philosophies, receive the same brochures/PR materials, and attend the same orientations, yet there will be striking differences in how individual students process the information and react to the message. To explore this question further, the notion of individuality should be highlighted and should warrant a review of the relationship between diverse student characteristics and student engagement strategies. The above has shown significant attention has been paid to organizational efforts and specific practices aimed at increasing student engagement.

*Educational Expenditures and Student Engagement*

As of 2006, few studies researched the connection between higher education expenditures and student outcomes/engagement. Hayek (2001) used quality of efforts indicators from the College Student Experiences Questionnaire (CSEQ) along with IPEDS and U.S. News & World Report to assess if expenditures were related to student engagement. In 2005, Ryan identified a "negative relationship between administrative (i.e., institutional support) expenditures and engagement" (Pike, Smart, Kuh & Hayek, 2006, p. 851). Other studies have focused more on the differences of expenditures across functions (e.g., instruction, research, and public service), trends in expenditures, or issues related to economies of scale or cost reduction in higher education (Smart, Ethington, Riggs & Thompson, 2002; Toutkoushian, 1999). These few studies related to

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expenditures and college outcomes have produced inconsistent findings, "making it impossible to derive a robust theoretical or conceptual framework for guiding research in this area" (Pike et al., 2006, p. 849).

As a result of the above, Pike et al., (2006) set out to examine this relationship between higher education expenditures and a key determinant of student learning – engagement in educationally purposeful activities.  The results showed that:  1) "the relationships between expenditure patterns and student engagement are complex and contingent on year in school, institutional control, and type of engagement," 2) "attending a doctoral-research university is negatively related to student engagement," 3) "the relationships between the socioeconomic status of the student body and engagement were opposite for public and private institutions," and 4) "money does not seem to be an important factor in creating a supportive, affirming campus environment" (p. 864-866). Their conclusion was that a simple conceptual model may not be able to explain the complex relationship between expenditures, student engagement and college outcomes.

This lack of research on this topic is somewhat surprising in light of the fact that "declining state funding for higher education and growing demands that colleges and universities be more transparent and accountable for student learning outcomes" (Pike, et al., 2006, p. 847).  It does provide an interesting component to this study and is deserving of further consideration.  Perhaps any possible connections between "costs" of professional development programming and levels of engagement should be explored in further studies.

## 5. Motivation, Expectations and Attraction Variable Set

From a motivational theory perspective, the process of developing "meaningful goals" and making actual progress toward the attainment of those goals is purposeful and enhances student motivation. Ryan and Deci (2000) suggest that a key to enhancing motivation is for individuals to understand that a given set of activities will yield valued outcomes. If using this perspective with college students, one would think that career exploration, leading to an increased understanding of how academic studies will enhance future career plans, is valuable to the collegiate experience. In a similar manner, professional development training assists students to prepare for the world of work through a focus on polish, professionalism and business etiquette. If students begin to understand how the development of a professional presence and "soft skills" (i.e., leadership, teamwork, etc.) will benefit them in the job search, it is expected their motivation to participate or become engaged in professional development training, as well as other school activities, increases. According to Lapan's research, "career planning can function as an external motivator that helps students make a connection between doing well in school and having choices and opportunities later in life, thereby enhancing student engagement" (Kenny et al., 2006, p. 273). Professional development activity can also function as this peripheral motivational force for college students.

Despite limitations of their 2006 study, the results of the Kenny et al., research identified two factors associated with student engagement – career planfulness and career expectations. Even though these are not identical to processes comprising professional

development practices, there is enough similarity to suggest that it is possible for professional development participation to enhance student engagement levels.

Another perspective deals with the reciprocal relationship that student engagement may impact career planning (Lapan & Kosciulek, 2001). Although the findings of Kenny et al. did not suggest that school engagement activity is causal of career development, it is of interest. As mentioned, the goal of this empirical/quantitative study was to gain an understanding of what are the correlates of student engagement in professional development activity. Consequently, this inverse relationship should be explored in future PDAE studies.

*The Role of Faculty in Student Engagement*

Literature suggests that a component of successful academic and social integration relates to consistent interactions between faculty and students. According to Umbach and Wawrzynski (2005), the traditional "quality measures" (e.g., admission standards, number of Ph.D. faculty, faculty research, financial resources, etc.) used to evaluate a college education are being questioned about their validity in measuring excellence in undergraduate education (Kuh, 2001; Pascarella, 2001). According to Pascarella (2001), the 1995 Education Commission of the States report, *Making Quality Count*, took issue with these "quality measures" as they "say nothing about how and why students were actively engaged in the learning process, the extent and nature of student interactions with faculty, the focus and intensity of academic experiences, and the overall level of student engagement" (Umbach & Wawrzynski, 2005, p. 154).

In light of the above, a closer look at students' experiences and interaction with faculty was addressed in this PDAE study. Previous research by Astin, specifically his inputs-environments-outcomes model, looked at the relationship between faculty-student contact, pedagogical techniques and student outcomes. He posited that involvement with faculty and student peer groups enhanced almost all aspects of learning and academic performance.

In addition, work by Chickering and Gamson (1987) identified seven engagement factors that influence the quality of students' educational experiences, five of them addressing faculty behaviors and characteristics. Several others (Astin, 1993; Ewell & Jones, 1996; Pascarella & Terenzini, 1991; Tinto, 1993, 2000) supported the positive effects of (informal and formal) faculty-student contact to enhanced student learning. These interactions with faculty influenced student engagement and were cited as predictors of student persistence (Braxton, Sullivan & Johnson, Jr. 1997; Hurtado & Carter, 1997; Pascarella & Terenzini, 1991; Stage & Hossler, 2000). This research suggests that faculty may play a critical role in encouraging students to participate in activities leading to enhanced student outcomes. These activities can be varied in nature and may include career-related professional development. Since faculty roles and faculty "cultures" vary from institution to institution, the impact of faculty is relevant to this PDAE study of student engagement at the Schumann School of Business. This faculty involvement issue was one of the new questions added to the Senior Student Satisfaction Survey (SSSS) used in this study.

*How do Expectations Affect Engagement Levels?*

Another approach to examining variances in engagement levels deals with how students influence their engagement potential, by focusing on the notion of "expectations." This illustrates the shift in the onus of engagement from the institution (discussed earlier) to the student. Tinto has suggested that students enter college with a set of expectations and if those expectations are not met, the social and academic communities are not viewed in the same light as if the expectations had been met. It has been suggested that this "disappointment" with the college/university translates to hindered integration (academic and social) which influences goal commitments and eventually impacts student departure. Whereas, developing an understanding of departure is not the focus of the PDAE research, the possible connection between "expectations" and decisions to utilize professional development services is of interest.

Braxton, Vesper and Hossler (1995) explored Tinto's concept of expectations to understand and possibly explain voluntary college student departure. Their study incorporated several theoretical points of view including, Tinto's five theoretical perspectives: psychological, economic, societal, organizational and interactional. Tinto's interactionalist model describes students' voluntary departure as longitudinal. He suggests that students possess (and bring to college) certain traits (i.e., ethnic background, socioeconomic status, high school performance, and parental/family influences). He proposes that these traits are responsible for influencing students' initial commitment levels to their institution and the eventual goal of graduation (Braxton, Vesper & Hossler, 1995). It is the student's entry traits and the initial commitment levels that work in

combination to influence the degree to which a student becomes integrated into the academic and social communities of the institution. The higher the integration level, the higher the commitment to the institution. Another way to explain this is that the student is "appraising whether or not he or she wishes to establish membership in the academic and social communities of a given college or university" (Braxton, Vesper & Hossler, 1995, p. 596). In other words, is there a good level of "fit" between the student and the institution?

Braxton, Vesper and Hossler initiated their study in light of the minimal research on Tinto's formulations of the influence of expectations on student persistence. Their purpose was to examine the effects or the extent to which expectations for various institutional traits are met, and how they influence a student's decision to depart from the institution. The hypothesis was that the higher the commitment level to 1) the institution and 2) the goal of graduation, the greater the degree of importance they attach to the fulfillment of their expectations for college (Braxton, Vesper & Hossler, 1995). The results of the study suggested support for the hypothesis since initial commitment to the institution had a "positive direct effect" on expectations for academic and intellectual development, expectations for career development, and expectations for a collegiate atmosphere. In addition, the greater the extent to which both academic and social integrations expectations were met, the greater the degree of actual academic and social integration.

Whereas the Braxton et al. study suggested implications for enrollment practices by the need for institutions to accurately portray their characteristics to prospective students (Braxton, Vesper & Hossler, 1995), it gives food-for-thought for other applications. From a professional development (or career services standpoint), this study suggests that students' perceptions of related institutional traits are important. More specifically, efforts need to be made to clearly identify what resources are available in this area, how academics relate to the world of work, and the correlation between professional development training and attainment of jobs and internships. Clearly describing the critical role of the PDC in the curriculum (as early as possible) and explaining how to maximize the benefits of its services can help students manage their early expectations. Once these expectations are met, increased academic and social integration are likely to occur. Stated another way, if a student's expectations closely resemble their actual experiences, this tends to help with the "shaping of a student's desire to establish membership in the academic or social communities" (Braxton, Vesper, & Hossler, 1995, p. 607). If the student has realistic expectations as to the benefit of participation in professional development activities and programming, then he/she is more likely to be academically/socially integrated and vested in the school as well as the PDC program.

## Summary

Educators, researchers, and policy makers suggest that institutions of higher education impact students in various ways. Academic learning, skill development,

personal growth, exposure to new cultures, and increased opportunities for career success are just a few examples of the effects of the post-secondary experience. In order for these institutions to maximize their effectiveness in transforming lives, research repeatedly mentions student engagement as a critical component. What is student engagement? As discussed in the third section of this literature review, in a broad sense, it is student involvement or the quality of effort students devote to activities that contribute to desired outcomes.

As previously stated, several researchers and practitioners believe there are two aspects of student engagement. The first is the amount of time and effort expended by students into their academics and other educationally purposeful activities. The second is how the institution creates curriculum/programs and deploys its resources to create environments conducive to fostering student engagement. Since this form of involvement can have a major impact on the way students utilize resources, it is important to invest time into understanding the obstacles facing disengaged students as well as the factors that motivate engaged students. Student support services are viewed by administrators/practitioners as very beneficial and are believed to play an important role within the higher education experience. In addition, they demand time, energy and valuable financial resources that are often limited at college and universities. Consequently, it is necessary to more clearly understand how and why students vary in their tendencies to fully participate.

This review of the student engagement literature showed how individual characteristics, pre-college/college credentials, organizational effectiveness and motivation/expectations play a role in understanding the challenges of student engagement. The relevant literature has addressed the interplay between characteristics (gender, race/ethnicity, socioeconomic status, etc.) and how faculty/administrators need to understand student variations when planning programs and services. The result of these interactions can shape the way students engage with supporting activities.

Besides student characteristics and organizational factors, student expectations play a role in engagement. This literature review included the belief that if expectations are unmet, there is disenchantment with the social and academic communities. This disenchantment negatively impacts social and academic integration, which hinders student success.

Productive engagement "is an important means by which students develop feelings about their peers, professors, and the institution that gives them a sense of connectedness, affiliation, and belonging, while simultaneously offering rich opportunities for learning and development" (Harper & Quaye, 2009, p. xxii). In order for engagement to occur, students must take ownership and invest time and effort in distinct activities, both educational, as well as extra-curricular or support activities. This may include studying, working with faculty, and taking advantage of services and resources offered by the institution. An example of one such service is the PDC at the Schumann School of Business. This leads to the question, "who is responsible for the

onus of engagement at Schumann?" Is it the responsibility of the institution to offer these opportunities or does the student have a key role in this process by taking advantage of the relevant services and resources? The answer is that both have an important role in this process.

Based on this literature review, it was hypothesized that there would be correlations between certain demographic, organizational and motivational variables and professional development activity. The expectations are as follows:

- Females score higher than males on PDAE
- Non-transfer students score higher than transfer students on PDAE
- Faculty involvement leads to a higher PDAE
- Hours worked per week negatively relates to PDAE

Since my observation of students' professional development activity over the last eight years has not shown noticeable differences in neither gender nor ethnicity, it is hypothesized that differences are related to other factors such as grades (either college or high school), PT/FT status, transfer status, campus attended, and faculty involvement in professional development.

Hopefully, this literature review drew attention to how a complex set of factors intersects and directly relates to participation in student services programming. My goal was to develop an understanding of the possible drivers that relate to variance in students' responsiveness to the PDC's initiatives. Perhaps this study will also encourage additional research to further understand the engagement issue related to relevant student services

and career services activity. This could lead to insight as to how to create environments

or manipulate conditions that promote student engagement in career/professional

development activity that will ultimately impact student success.

# CHAPTER 3

## METHODOLOGY

Introduction/Overview

In an attempt to identify specific drivers that affect levels of student engagement in professional development activity, a quantitative design was used. More specifically, the goal was to assess what specific demographic, organizational and motivational factors (using a distal to proximal flow of relevance) serve as potential initiators of variance in levels of professional development activity engagement (PDAE) within the study population. The method selected to collect these data was an existing student survey with the intent of analyzing the results to identify drivers/correlates of engagement, specifically relative to PDAE. This study attempted to provide insight as to the types of students who are engaged or disengaged by examining a combination of student background characteristics, "pre-college" credentials, "college" credentials, and organizational/motivational factors.

## A. Research Design

A quantitative methodology was chosen for multiple reasons. Numerical summaries of the students' characteristics/backgrounds as well as their self-reported survey responses and record-based ISIS (Integrated Student Information System) data were used to determine what independent variables could explain the criterion behavior.

This was in sharp contrast to thick descriptions obtained from detailed student interviews as to "how or why" they were intrinsically or extrinsically motivated to engage in professional development activity.

This quantitative study was undertaken to establish associations between variables versus establishing causality. Comparisons across demographics of the student population (age, gender, race, transfer status, etc.) were used instead of attempting to understand engagement behavior at the individual case level. This study looked at the breadth of a large student population of graduating business majors rather than taking an in-depth qualitative approach with few subjects.

The specific purpose of this study was to identify if there was a correlation between Student Behavioral Engagement Measures (SBEM) and various student characteristics (demographics and background data), organizational factors and motivation. Multiple correlational analyses were used in light of the three+ measurement variables and explored the linear relationship between the above. This survey attempted to understand which of these characteristics (demographic, organizational and motivation-related) were present in those who are very engaged, moderately engaged, or not engaged. For example, were students from specific ethnic groups more engaged than their peers? Do demographics or pre-college credentials carry more weight in the engagement equation? Do college credentials (major, GPA, living location, etc.) combine with first generation college status to foster or hinder engagement?

Validity and Reliability:

To ensure validity, several steps were taken. Regarding internal validity, the entire graduating class (approximately 1,300 students) was surveyed rather than selecting a random sample for study. The natural variations in student populations were addressed by evaluating the data obtained from the administration of the two SSSS questionnaires. Survey one was launched at the end of fall 2010 (N = 374) and survey two took place at the end of spring 2011 (N = 490). This fall/spring population comprised most of the graduating seniors for the 2010-11 academic year, but did not include summer 2011 graduates (approximately 200 students) due to time constraints.

Secondly, the survey is "mandatory" and approximately 98 - 99% of seniors respond. This large number of study participants (1,000+ respondents) contributed to the validity as the number of observations is significantly greater than number of parameters. Despite the mandatory nature of the SSSS, typically about 1 - 2% choose not to complete the instrument. This very small (but important) group may be indirectly indicative of non-engagement behavior. Separate/future analysis of their demographic and background characteristics could provide additional insight into what types of students are not engaged in professional development activity since they opted not to complete a "mandatory" survey.

In addition, the modifications to the original survey (to include additional professional development questions) were approved in time to administer the survey to the December 2010 graduating class in addition to the May 2011 graduates. Originally,

only one semester's worth of data (May graduates) were to be collected. By having the survey ready "ahead-of-schedule," this allowed for running preliminary statistical analyses to assess if modifications might be needed before administering the May 2011 survey.

External validity was enhanced as a result of the breadth of the survey respondents. The attempt to generalize findings to similar undergraduate populations will be helpful to those who are looking to increase student participation (or engagement) in professional development or similar types of activity such as career-related endeavors. All genders, races, ages, etc. comprising the undergraduate business school population were represented in the survey.

The SSSS was administered by the Dean's Office at Schumann. Despite the fact that the Professional Development Center was interested in collecting the student engagement data, there was not a direct interaction of myself (the researcher and Director of the Center) and the study group when they were completing the SSSS. It is highly improbable that the students realized that some of the questions were directly related to research on professional development or the PDC and simply saw them as part of the general student satisfaction or "exit" survey as sometimes it is called. This enhanced the ability to explore generalization to outside populations rather than administering the survey directly via the PDC or through classes conducted by the PDC. In other words, a research "environment" was being avoided.

**B. Sample Population and Subjects**

Approximately 1,300 undergraduate business majors were involved in this study. This group focused on all graduating seniors representing all fourteen business majors at Schumann.  The population was selected due to the readily available large sample size and the breadth of the group.  In addition, the inclusion of all seniors (with the exception of August grads – about 200 students) made this a statistically representative sample of the Schumann undergraduate population.  In addition, demographic information from previous years suggested that this was a fairly diverse pool (e.g.,  in 2009-10, 53% characterized themselves as Caucasian, 22% as Asian, 15% as African American, 3% as Hispanic/Latino and 8% other).

Since the SSSS was administered toward the end of the last semester, the respondents had ample opportunity to become involved in professional development activity.  This included completion of the one-credit mandatory professional development strategies course taught by the Professional Development Center.  This course can be taken at any time between the sophomore and senior years with most students (approximately 45%) taking it during their junior year (the remaining 55% is divided between freshman, sophomore, senior and 5th year students).  In addition to the compulsory course, students had sufficient time to engage in volunteer professional development activity (completion of internships, SPO involvement, on-campus recruiting, employer networking events, and usage of the Center's on-line career management system, JobNet).  This also included job/internship applications.  Because of this multi-year exposure to the structured, mandatory professional development program

along with optional components of the PDC, most students should have been familiar with the concept of professional development at Schumann and therefore should have understood the related questions in the SSSS.

Another advantage of using this sample was the ability to verify certain independent variables in addition to providing supplemental information via ISIS (e.g., high school GPA, transfer institution, transfer GPA, SAT scores, etc.) on the survey respondents.  The Senior Assistant Dean who administers the survey each semester also oversees the PDC.  She understands the importance of identifying correlates or antecedents of engagement and consequently was receptive to providing access to the ISIS data.  She was also agreeable to utilizing (and modifying) the SSSS to gather this relevant data on engagement.  In addition, engagement is of interest to Schumann's senior administration thereby providing added support for this research endeavor.

## C.  Instruments and Materials

Rather than create a voluntary student engagement questionnaire, identify a suitable sample, and hope for a statistically significant response rate, the decision was made to utilize an existing, mandatory survey of undergraduate business majors, the Senior Student Satisfaction Survey (SSSS).  The SSSS, which contains both quantitative and qualitative data, is deployed in the spring, summer, and fall to all seniors who are currently taking BA4196: Global Business Policies. The purpose of the survey is to obtain information about graduating students, their thoughts on the core /major curricula, and their overall Schumann experience.  It is launched toward the end of the semester and

is sent by the Senior Assistant Dean to indicate the importance of this survey. It was first deployed in the early 1990's and consisted of 29 questions. Administered during the last semester of the senior year, this 32-question survey focuses on undergraduate business student satisfaction. Intermixed with the satisfaction questions was information on basic student data (major, GPA, full/part-time status, transfer status, etc.) as well as activity data (e.g., hours worked, hours spent on schoolwork, attendance at Student Professional Organization (SPO) meetings, participation in an internship, etc.). These latter items are indicative of student engagement in professional development activity. The relevance of behavioral manifestations of engagement in professional development activities to the research questions warranted a closer look at the SSSS for use in this study.

This survey is "mandatory" and completion is required in order to receive one's diploma (theoretically). Respondents are tracked and follow-up email reminders are sent to those who have not responded. The average completion rate is 98%-99%. In light of this extremely high response rate, coupled with the fact that approximately 1,000-1,200 graduating seniors take the survey annually, a decision was made to use the existing Senior Student Satisfaction Survey for this professional development engagement study.

Although is it considered compulsory, the Schumann School of Business has not withheld a diploma for those not completing the survey. The actual percentage of students taking the survey specifically in their last semester before graduating (during the capstone course) might not equal the 99% rate. This means that most of the students complete the survey before they graduate, yet they may take the survey a semester earlier

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(when they are taking the capstone course) because they "anticipated" to be graduating at that time.  The important factor is that most do complete the survey before they graduate.

The next step was to request modification of the current survey to add new components that would be useful in measuring student engagement.  Concerns included how the addition of questions would add to the length of the SSSS, as well as how to ensure consistency with the format of the current questions.  Since student engagement is a current topic of interest amongst senior administrators at the Schumann School of Business, the proposal to modify the current survey was well received.  The revised survey was reviewed extensively, certain questions were combined and/or eliminated, and four "new" questions related to engagement in professional development activity were approved for inclusion.  In addition, several items were modified to facilitate coding for eventual statistical analysis.  The modified survey (consisting of 32-items) was approved by the school's Program Committee – a small team of business school faculty and administrators.

The revised survey (which included four new items related to professional development) contained 32 questions (29 multiple-choice and three open-ended) and was completed online.  Three additional relevant (professional development) questions carried over from the 2009-10 survey.  The survey is re-sent up to three times to those who do not respond.

The Fall 2010 survey was deployed on November 29, 2010 and was closed on January 27, 2011. The Spring 2011 survey was administered in April 11, 2011 and closed on June 1, 2011.

**D. Variables in the Study**

Independent Variables:

The thirty independent variables examined in this study were pre-determined and were ascertained by the survey questions, as well as via the additional student data available in ISIS. This was in contrast to a wide variety of unexpected "causes" or "explanations" of engagement that may be uncovered in detailed interviews. The independent variables for this quantitative study were selected in advance. There were many cases with limited, defined variables as compared to few cases with numerous, open-ended variables.

The independent variables were organized into five variable sets using a distal to proximal flow. This arrangement suggested that distal variables would have a less direct impact on the outcome while proximal variables would have the most influence. These variable sets included:

1. Student Background

2. Pre-college Credentials

3. College-related Factors

4. Organization-related Factors

5. Motivation, Expectations and Attraction

Thirty specific variables comprised this data set and were obtained via self-reported measures, as well as through ISIS.  This allowed for a combination of self-reported and record-based data.   In the case of overlap between data, the ISIS data superseded the self-reported data.

The independent variables were not manipulated and/or controlled.  Instead, this study measured the naturally occurring levels of the variables to determine if they might explain the dependent (criterion) variable of engagement in professional development activity.

A number of the Senior Student Satisfaction Survey (SSSS) questions (12 out of 32) were related to student background/pre-college credentials/college-related factors. The remaining were related to organizational and motivational factors.  To "match" the "anonymous" SSSS responses with the students' ISIS data, the survey's email addresses were manually matched to the students' ISIS records.  The administrator of the survey completed this process to assure anonymity to myself as the researcher.  In addition to these 12 demographic items, additional pre-college data (i.e., high school attended, SAT scores, and transfer institution, etc.) were gathered from ISIS.  This served as supplemental independent variables culminating in 30 IVs.  This process of matching these records was time consuming and labor intensive, but the combination of self-reported and record-based student characteristic data contributed to a robust study design. Any discrepancies found between the self-reported data and ISIS data were overridden by

ISIS. For example, the GPA in ISIS was deemed to be the correct data element if a student self-reported a higher GPA.

Dependent Variable:

The dependent (criterion) variable was level of engagement in PDAE. It was determined by Student Behavioral Engagement Measures (SBEM). These were the behavioral gauges of engagement with the Professional Development Center (PDC) and professional development activity at the Schumann School of Business. The indicators of engagement (SBEM) included:

1.  SPO Involvement (attendance at meetings)

2.  General PDC Usage

3.  Perceived level of PDAE

4.  Completion of "Getting PDC'd" process

5.  Internship activity

The Senior Student Satisfaction Survey questionnaire contained a number of questions related to these measures and was used to measure the level of engagement in professional development activity. The SBEM were self-reported.

## D. Data Analysis

This study explored the relationship between specific student characteristics, organizational and motivational factors and levels of engagement in professional development activity. The available numerical data obtained from the SSSS and ISIS led

to the selection of a quantitative study.  In order to answer the research questions, the

study utilized Statistical Package for Social Sciences (SPSS) and several statistical

analyses were used.  This included Pearson correlations, ANOVA and multiple

regression analyses.   Since the SSSS is an annual survey, a possibility for a "post" 2010-

11 academic year data analysis is a possibility.

# CHAPTER 4

# RESULTS OF THE STUDY

This goal of this study was to identify possible drivers of engagement in professional development activity among undergraduate business majors. Student participation levels in voluntary student services vary and therefore an attempt was made to isolate specific correlates to utilization of such resources. Thirty drivers (or independent variables) were selected for analysis and categorized into five variable sets using a distal to proximal flow in terms of their expected impact on engagement of business undergraduates in professional development activity.

## Description of the Sample

The students surveyed in this study were graduating seniors (Class of 2011) at the Schumann School of Business. A total of 864 students completed the survey (Fall 2010 - 374; Spring 2011 – 490). Although students are told the survey is mandatory, a very small percentage elects to forgo completion.

The individual survey responses to the Senior Student Satisfaction Survey (SSSS) were matched to student records in the University's ISIS database to provide additional demographic information that was not self-reported in the SSSS. Since student ID numbers were not collected in the SSSS, email addresses were used for identification.

This matching process was completed by the Senior Assistant Dean of Undergraduate

Student Services to assure anonymity of the students (from the researcher's perspective).

The matched data were provided to me for the purposes of this study.  Descriptive data

on the subjects are shown in Tables 4.1, 4.2, 4.3 and 4.4.

Table 4.1 - Distribution of Study Population by Demographics (N = 864)

| Variable | Category | n | % |
| --- | --- | --- | --- |
| Gender | Female | 363 | 42.0 |
|  | Male | 501 | 58.0 |
| Ethnicity | Native American | 2 | .2 |
|  | Asian | 100 | 11.6 |
|  | African American | 141 | 16.3 |
|  | Hispanic | 24 | 2.8 |
|  | White | 458 | 53.0 |
|  | Other | 80 | 9.9 |
|  | Missing | 59 | 6.8 |
| Age | Non-Traditional | 184 | 21.3 |
|  | Traditional | 680 | 78.7 |

Table 4.2 - Distribution of Study Population by Enrollment Status/Campus (N = 864)

| Variable | Category | n | % |
|---|---|---|---|
| Full-time/Part-time | Full time | 729 | 84.4 |
| | Part-time | 135 | 15.6 |
| Division | Day | 713 | 82.5 |
| | Evening | 151 | 17.5 |
| Campus | Montgomery County | 61 | 7.1 |
| | Center City | 20 | 2.3 |
| | Main | 764 | 88.4 |
| | Missing | 19 | 2.2 |

Table 4.3 - Distribution of Study Population by "Entering" Status (N = 864)

| Variable | Category | n | % |
|---|---|---|---|
| Entering status | 1st semester freshman | 412 | 47.7 |
| | Transferred as Freshman | 43 | 5.0 |
| | Transferred as Sophomore | 192 | 22.2 |
| | Transferred as Junior | 201 | 23.3 |
| | Transferred as Senior | 16 | 1.9 |

Table 4.4 - Distribution of Study Population by Academic Characteristics (N = 864)

| Variable | Category | n | % |
|----------|----------|-----|------|
| BA2101 Grade | F | 8 | .9 |
| | D | 1 | .1 |
| | C- | 2 | .2 |
| | C | 6 | .7 |
| | C+ | 7 | .8 |
| | B- | 8 | .9 |
| | B | 33 | 3.8 |
| | B+ | 66 | 7.6 |
| | A- | 108 | 12.5 |
| | A | 615 | 71.2 |
| | Missing | 10 | 1.2 |
| Overall GPA | 1.01 – 2.00 | 2 | .23 |
| | 2.01 – 2.50 | 72 | 8.3 |
| | 2.51 – 3.00 | 303 | 35.1 |
| | 3.01 – 3.50 | 299 | 34.6 |
| | 3.51 – 4.00 | 179 | 20.7 |
| | Missing | 9 | 1.0 |

**Variable Sets**

Thirty drivers of engagement were derived from a total of thirty-five independent variables originally identified as possible correlates of engagement in student professional development activity. These original drivers consisted of twenty-two IVs

that were self-reported in the Senior Student Satisfaction Survey (SSSS). This, combined with eighteen items obtained from ISIS, made for a total of forty possible drivers. There was an overlap between five of the IVs (FT/PT status, campus attended, honors status, major, and GPA). ISIS data overrode SSSS self-reported data in terms of accuracy, so the five overlapping SSSS variables were eliminated resulting in thirty-five original drivers at the early stages of this study.

These IVs were then categorized into five variable sets using a distal to proximal flow. This arrangement suggested that distal variables would have a less direct impact on the outcome while proximal variables would have the most influence. These variable sets included:

- Student Background

- Pre-college Credentials

- College-related Factors

- Organization-related Factors

- Motivation, Expectations and Attraction (for PDAE)

This last variable, Motivation, Expectations and Attraction was seen as the most proximal variable in relation to the outcome of involvement/persistence and was expected to have the strongest impact on engagement in professional development activity.

Data availability issues resulted in the modification of two variables and eventual removal of five of the anticipated drivers of engagement. This meant the original group

of thirty-five independent variables was reduced to thirty. Student information that was originally thought to be readily available proved to be difficult to obtain and/or rank. This included High School Attended, High School Grades, SAT/ACT/TOEFL scores, Transfer Institution, and Transfer GPA.

The first variable eliminated was High School attended. This was because there was not an efficient way to rank order the hundreds of schools to determine which programs had stronger academic components. More importantly, this information was not available for all survey respondents.

The second variable that proved to be problematic was High School GPA. This was in light of the fact that this measure of academic performance was available for only a small number of students (10.8% - 93 out of 864 students). A major University-wide initiative to integrate and upgrade all major administrative systems into a consolidated database-driven infrastructure was occurring at the time of this study. This initiative meant a transition from ISIS to Banner and resulted in the loss of an easy-to-run report on High School grades. Consequently, this information was extremely difficult to obtain other than manually searching through old student records. Since I was relying on the Senior Assistant Dean to compile the student data, a decision was made to eliminate High School Grades from the independent variable set as a key variable. Instead, analysis would be run on the available data.

A portion of the data (35.5%) was missing for the following: SAT Math, SAT Verbal, and ACT/TOEFL scores. The explanation for this was that these data on "high transfer" students are not available in ISIS. A high transfer is defined as a student who has an associate degree from a school linked with the University's articulation agreement and therefore is not required to provide SAT, ACT and TOEFL scores.

In addition, Transfer Institution was omitted. This was for the same reasons High School Attended was eliminated. Data were not available for all students and there was not a suitable way to rank/code the schools that were available. Finally, Transfer GPA was removed from the variable sets since it was not obtainable as originally anticipated.

The result was the elimination of five of the independent variables and limited use of two. The five variable sets, consisting of the final thirty independent variables, are shown in Table 4.5. The eliminated variables were retained in the table but shown in strikethrough text.

Table 4.5 - Independent Variable Sets

| | Self-reported in SSSS (Question #) | ISIS data |
|---|---|---|
| **1. Student Background** | | |
| • Birth date/Age | | X |
| • Gender | | X |
| • Ethnicity | | X |
| • Parental Education | 10 | |
| **2. Pre-College Credentials** | | |
| • ~~High School attended~~ | | ~~X~~ |
| • High School grades  (limited data) | | X |
| • SAT (Math/Verbal) (limited data) | | X |
| • ~~ACT~~ | | ~~X~~ |
| • ~~TOEFL~~ | | ~~X~~ |
| • Entered as F, S, J, S/Transfer | 2 | |
| • ~~Transfer institution~~ | | ~~X~~ |
| • ~~Transfer GPA~~ | | ~~X~~ |
| • Year entered college | 3 | |
| **3. College-Related** | | |
| • FT/PT status | 1 | X |
| • Campus attended | 5 | X |
| • Lived on/near campus | 6 | |
| • Honors student | 7 | X |
| • Major(s) | 8, 9 | X |
| • GPA (cumulative) | 11 | X |
| • Hours/week on schoolwork | 12 | |
| • Hours worked/week | 13 | |
| • Professional Develop. Course Grade | | X |
| • Credit Hours attempted | | X |
| • Credit Hours passed | | X |
| **4. Organization-Related** | | |
| • Overall satisfaction with BBA program | 23 | |
| • Ease of access | 24 | |
| • Quality of service | 25 | |
| • Challenged by major requirements | 26(c) | |
| **5. Motivation for PDAE** | | |
| • Valued academic scholarship | 4(a) | |
| • Valued job opportunities | 4(e) | |
| • Attracted by location | 4(f) | |
| • Attracted by faculty reputation | 4(g) | |
| • Valued professional development | 4(h) | |
| • Attracted by study abroad opportunities | 4(m) | |
| • Had Faculty involved in PD | 19 | |

## Computation of the Dependent Variable

The Senior Student Satisfaction Survey questionnaire contained a number of variables related to student engagement which is the primary dependent variable for this study.  A list of these variables is presented in Table 4.6.  The dependent variables measured the level of engagement in professional development activity.  Behavioral manifestations were used and were called Student Behavioral Engagement Measures (SBEM).  These are examples of engagement with the Professional Development Center (PDC) and professional development activity at the Schumann School of Business.  The indicators of engagement included Student Professional Organization (SPO) involvement, usage of the Professional Development Center (PDC), perceived level of engagement, and internship activity.  The level of activity/usage of services is self-reported data in the Senior Student Satisfaction Survey.

Table 4.6 – Dependent Variables

| Student Behavioral Engagement Measures (SBEM) | Self-reported SBEM (via SSSS) |
|---|---|
| | Ques. # |
| When joined SPO | 14 |
| SPO Involvement/meetings attended | 15 |
| PDC Usage | 16 |
| • Workshop attendance | 16(a) |
| • Multiple resume critiques | 16(b) |
| • JobNet Usage | 16(c) |
| • OCR - On-campus Recruiting (interviews) | 16(d) |
| • Prof. Dev. Activities sponsored by SPOs | 16(e) |
| • Senior Reception | 16(f) |
| • Spring Connection | 16(g) |
| • Industry (Mock) Interviews | 16(h) |
| • Reported job/internship offer to PDC | 16(i) |
| • Used PDC Blackboard resources | 16(j) |

Table 4.6 – Dependent Variables *Continued*

| Student Behavioral Engagement Measures (SBEM) | Self-reported SBEM (via SSSS) |
|---|---|
| Perceived level of PDAE | 17 |
| When PDC'd | 18 |
| Internship Activity | 20 |

A number of data analysis scenarios to create the dependent variable (or variables) were explored. These included both simple summations of various combinations of the questions listed in Table 4.6 as well as a number of factor analyses. For all of the various factor analyses, principal components extraction method followed by a varimax rotation was employed. Following the recommended procedures for factor interpretation, factors with eigenvalues over one were examined as well as a review of the scree test. These analyses produced four potential measures of engagement. These four solutions were then correlated with all of the remaining variables in the data set. While there were some minor differences, basically all of the four engagement measures produced essentially the same major results. As a consequence, it was decided to retain the most robust solution and to use only this measure. This has the obvious advantage of simplifying the data analyses, although there is some minor loss of nuance. The dependent variable that was chosen resulted from a factor analysis of Questions 14, 15, 16, 17, 18 and 20. This produced one factor which accounted for 65% of the variance. The resulting factor had factor loadings over .4 for all of the questions with the exception of Question 14. The combination of the remaining five questions (15, 16, 17, 18, and 20), therefore, became the dependent variable. To simplify interpretation of the results, the factor score was converted to a T score thereby making the mean across all subjects

50 with a standard deviation of 10.  This factor score will be called "Total DV"

throughout the remainder of this chapter.


## Analysis of Major Research Questions

How does the above analysis relate to the main research question of this study?

The questions leading this study were:

- What drivers correlate with undergraduate business student engagement levels in

  professional development activity?  In other words, why are some students more

  engaged than others?

  - Is this variance in engagement level due to certain factors related to a

    student's background/pre-college life?  If so, what are those factors?

    - Do factors such as age, gender, parental education level, and transfer

      status affect students' engagement levels?

  - Does a student's current situation affect his/her engagement level?

    - Do factors such as major, campus living arrangements and PT/FT

      status have an impact?

  - Do certain types of experiences (faculty interaction, hours worked, living on

    campus and Student Professional Organization involvement) affect

    engagement levels?

  - What is the hierarchy of the correlations between the above factors and

    student engagement levels?

Several significant correlations addressing the above questions were found and are shown below in Table 4.7.  Items with a question number represent Senior Student Satisfaction Survey data and the remaining items represent ISIS data.  The corresponding variable set is also included.  Cronbach's Alpha for the dependent variables = .733.

Before specific statistical analyses are presented, a comment should be made about the interpretation of results with a sample size as large as the one used in this study.  Since the sample size for all of the analyses that will be reported is large, it is important to point out that the issue of statistical significance is largely moot since almost everything will be statistically significant.  With a sample exceeding 800 subjects, the power of any statistical test to detect even extremely small effects is almost 100%.  The critical issue, therefore, will seldom be whether the result of the statistical analysis exceeds the conventional .05 level, but rather, given that this level is achieved, how "meaningful" is the result?  In empirical analyses, this is called the effect size (Cohen, 1969) and it will be a critical component of all the analyses presented.  In current usage, the most commonly reported measure of effect size for correlational analyses is the correlation squared.  Although there is no complete consensus on this issue, many texts now list as meaningful (or impactful) any correlation that, when squared, equals .10 or greater.  This corresponds to what Cohen calls a medium to large effect size.  The relationship between Cohen's d and $r^2$ has been shown to be the following:

| Cohen's d Metric | Value of d | Value of $r^2$ |
|---|---|---|
| Large | .8 | .138 |
| Medium | .5 | .059 |
| Small | .2 | .010 |

Table 4.7 - Pearson Correlations with Total DV in Rank Order

| Variable | Correlation | Interpretation: Students with higher scores on the Total DV... | Variable Set |
|---|---|---|---|
| Q2: Status entering Schumann School | -.339 | ...more typically entered Schumann as freshmen | Pre-College |
| Q19: How many faculty were instrumental in prof. development | .303 | ...more faculty were instrumental in their prof. development | PD Motivation |
| Q6: How many semesters live on/near campus | .281 | ...lived on or near campus for more semesters | College-related |
| ISIS: High School GPA | .265 | ...had higher high school GPAs | Pre-College |
| Q24b: PDC Ease of access | .252 | ...made more use of the Professional Development Center | Organization-Related |
| Q11: Cumulative GPA | .240 | ...had higher cumulative GPAs | College-related |
| Q7: Honors | .231 | ...participated in the honors program | College-related |
| Q25b: PDC quality of service | .222 | ...rated the professional dev. center more highly | Organization-Related |
| ISIS: Hours Attempted | .215 | ...attempted more hours | College-related |
| ISIS: Age | -.215 | ...are older (more typically non-traditional) | Student Background |

Table 4.7 - Pearson Correlations with Total DV in Rank Order *Continued*

| Variable | Correlation | Interpretation: Students with higher scores on the Total DV... | Variable Set |
|---|---|---|---|
| Q4m: Study Abroad | .205 | ...were attracted to Schumann by possibility of studying abroad | PD Motivation |
| Q4a: Academic Scholarship | .183 | ...were attracted to Schumann by reputation of academic scholarship | PD Motivation |
| Q23: Overall satisfaction with BBA program | .174 | ...are more satisfied with the BBA program | Organization-Related |
| Q4e: Job opportunities | .164 | …were attracted to Schumann by job opportunities | PD Motivation |
| Q4h: Formal professional dev. opportunities | .155 | ...were attracted to Schumann by formal PD opportunities | PD Motivation |
| Q1: Status while attending Schumann | -.153 | ...were full time students | College-related |
| Q4f: Location | .135 | ...were attracted to Schumann by the location | PD Motivation |
| Q3: Year entered college | .132 | ...entered college in more recent years | Pre-College |
| Q26d: Major requirements | .128 | ...rated major requirements more positively | Organization-Related |

Table 4.7 - Pearson Correlations with Total DV in Rank Order *Continued*

| Variable | Correlation | Interpretation: Students with higher scores on the Total DV... | Variable Set |
|---|---|---|---|
| ISIS: BA2101 grade | .122 | ...obtained a higher grade in BA2101 | College-related |
| ISIS: SAT Verbal | .121 | ...had higher SAT Verbal scores | Pre-College |
| ISIS: SAT Total | .120 | ...had higher SAT Total scores | Pre-College |
| Q4g: Professors | .114 | ...were attracted to Schumann by the professors | PD Motivation |

The data analyses summarized above suggest the following drivers correlate with student engagement in professional development activity:

- **Student Status:** The most significant correlation of engagement activity is a student's status entering the Schumann School (-.339). The negative correlation suggests that students who entered the University as first semester freshmen were more likely to be engaged in professional development activity. Entering the university as a freshman is a strong indicator of who will be engaged.

- **Faculty Involvement:** The second most significant correlation was the involvement of faculty in a student's professional development (.303). When more faculty are involved in a student's professional development, the higher the engagement levels.

- **Where Lived:** The number of semesters in which a student lives on or near campus positively correlates to engagement (.281). This is consistent with literature that shows when students spend more time on campus they have more opportunities to become engaged in professional development activity.

- **High School GPA:** Even though the sample size of available data was small (data was available only on 10.8% of the sample), there was a positive correlation between higher high school GPAs and engagement (.265). This was consistent with the students who had a higher cumulative college GPA (.240).

- **Ease of Access to the PDC:** Next in rank order was the ease of access to the professional development center (.252). Students who rated the Center more highly had higher engagement scores. This driver of engagement relates to the impact that organizational culture has on the student.

- **Cumulative GPA:** Overall GPA was next (.240) in the ranking order. Students with higher GPAs had higher engagement scores.

- **Honors Program:** Consistent with the above is participation in the honors program (.231). Since honors students have high GPAs, this supports the finding above that higher GPAs translate to higher engagement levels.

- **PDC Quality of Service:** Next is the perceived quality of service provided by the PDC (.222). Students who more positively rated the Center as meeting their needs had higher engagement scores. Similar to the rating on ease of access of the PDC, this component looks at the importance of the student service unit in meeting expectations of its student users.

- **Hours Attempted:** The number of credit hours a student attempts to complete was not originally identified as a potential driver of engagement, but was included in the analysis since it was a component of the student background data obtained via ISIS. Hours Attempted refers to the total number of credit hours for which a student registers. Higher engagement scores were seen in the students who attempted more hours (.215).

- **Age:** How did age affect engagement levels? The -.215 correlation suggests that older students are more likely to be engaged.

- **Reasons for Choosing the Schumann School/Attraction Factors:** The next correlation in rank order was related to reasons a student chose to attend the Schumann School of Business. First was an attraction to Study Abroad opportunities (.205) followed by Academic Scholarship (.183). These items do not directly relate to professional development activity, but align with the notion that when "expectations" (that the student has of the organization) are met, participation is more likely to occur (engagement).

- **Academic Program Satisfaction:** The analysis showed there was a positive correlation between overall satisfaction with the BBA program and higher engagement scores (.174).

- **FT/PT Status:** The primary status (full-time versus part-time) while attending the Schumann School indicated that there was a significant correlation (-.153). The correlation was negative, but based on the way the data were coded; the analysis indicates that full-time students are more engaged in professional development activity.

- **University Location:** Congruent with the previous items that attracted students to the Schumann School, location was a factor (.135). Students who rated location more highly had higher engagement scores.

- **Year Entered College:** The year a student entered college suggests that those students who started an academic program in more recent years were more engaged (.132).

- **Rating of Major Requirements:** The .128 correlation shows a small relationship between students who felt more challenged by their major requirements and were more engaged in professional development activity.

- **Professional Development Course Grade:** A positive correlation (although low - .122) exists between BA2101 grade (the professional development course offered by the PDC) and engagement. Despite the limited variance in the course grades (85% of the grades were A or A-), students who achieve a higher grade are more likely to be engaged/participate in the services/resources discussed in the class.

- **SAT Scores:** Despite the limited SAT data (scores were available for only 64.5%), there was a positive correlation between both Verbal and Total SAT scores: .121 and .120 respectively.

- **Role of Faculty in Choosing the Schumann School:** Finally, there was a small, but positive correlation (.114) between students viewing faculty as a reason for choosing to attend the Schumann School. Students who were attracted to Schumann by the professors scored higher on the PDAE variables.

The correlations shown in Table 4.7 (and described above) are listed in rank order by the strongest to weakest (significance level .000). The order of the correlations did not necessarily match the original distal to proximal variable flow anticipated to be the case. In other words, the strongest correlations were not solely in the "Professional Development Motivation" variable set; however, most of these significant correlations were interspersed between the $2^{nd,}$ $3^{rd,}$ $4^{th}$ and $5^{th}$ variables sets.

### Non-significant Variables

Non-significant relationships were also found. They are shown below in Table 4.8 and include the corresponding variable set.

Table 4.8 – Non-Significant Variables

| Variable | Correlation | Variable Set |
|----------|-------------|--------------|
| Gender | N/S | Student Background |
| Parental Education | N/S | Student Background |
| Hours Worked | N/S | College-Related |
| Hours spent on schoolwork | N/S | College-Related |
| Credit hours passed | N/S | College-Related |

The data analysis prompted the creation of a graphical representation of how the

five variable sets related to Professional Development Activity Engagement (PDAE).

This model is shown in Figure 4.1.  Significant correlations and ANOVA results are

shown in bold and ranked numerically according to their significance level.  Non-

significant correlations (as related to their original anticipated effect on student

engagement) are included as regular text.  The original anticipated strength of the

relationship is represented by the increase in thickness of the directional lines and

suggests an increase in significance of the correlations; hence the distal to proximal flow.
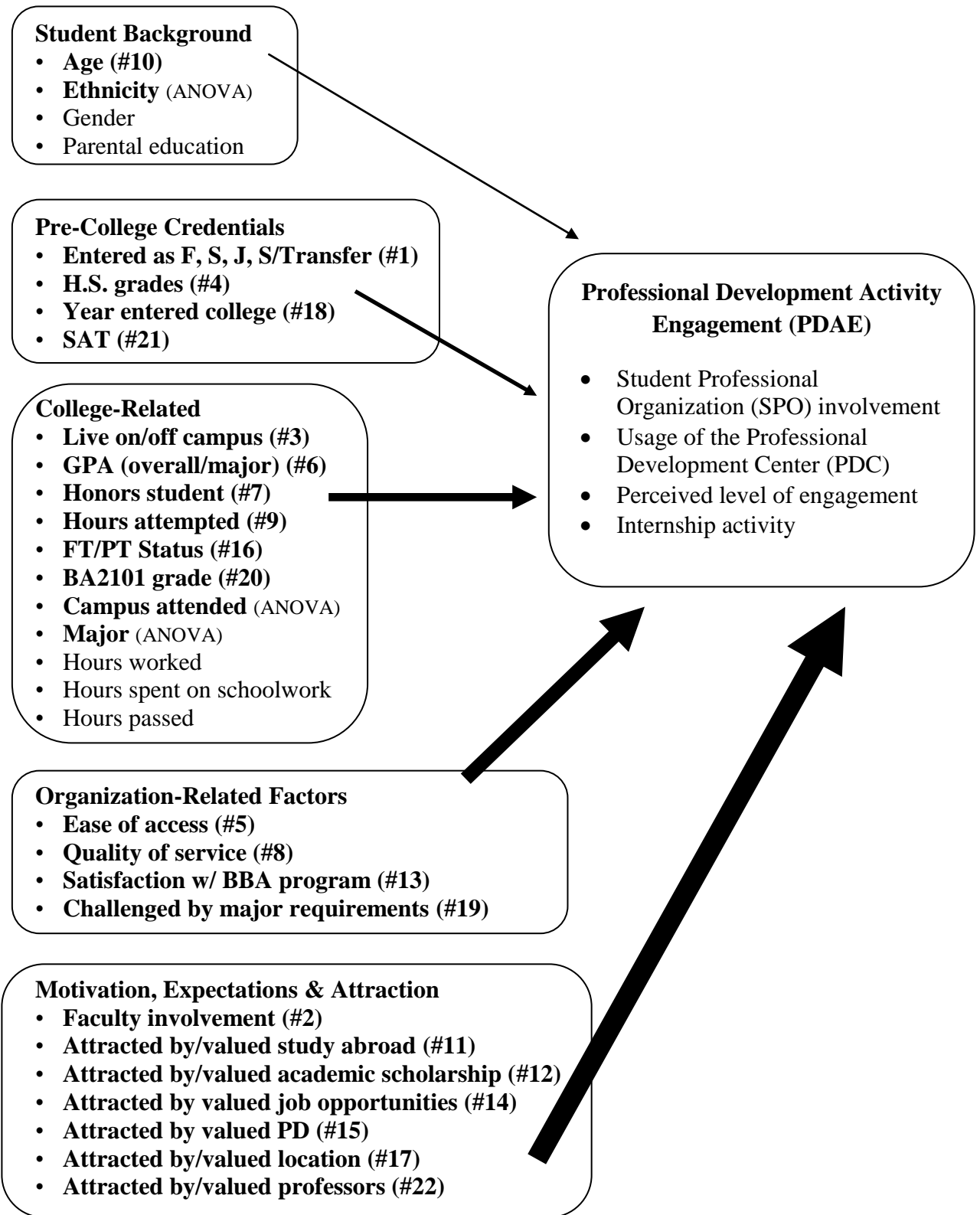
**Student Background**
- **Age (#10)**
- **Ethnicity** (ANOVA)
- Gender
- Parental education

**Pre-College Credentials**
- **Entered as F, S, J, S/Transfer (#1)**
- **H.S. grades (#4)**
- **Year entered college (#18)**
- **SAT (#21)**

**College-Related**
- **Live on/off campus (#3)**
- **GPA (overall/major) (#6)**
- **Honors student (#7)**
- **Hours attempted (#9)**
- **FT/PT Status (#16)**
- **BA2101 grade (#20)**
- **Campus attended** (ANOVA)
- **Major** (ANOVA)
- Hours worked
- Hours spent on schoolwork
- Hours passed

**Professional Development Activity Engagement (PDAE)**
- Student Professional Organization (SPO) involvement
- Usage of the Professional Development Center (PDC)
- Perceived level of engagement
- Internship activity

**Organization-Related Factors**
- **Ease of access (#5)**
- **Quality of service (#8)**
- **Satisfaction w/ BBA program (#13)**
- **Challenged by major requirements (#19)**

**Motivation, Expectations & Attraction**
- **Faculty involvement (#2)**
- **Attracted by/valued study abroad (#11)**
- **Attracted by/valued academic scholarship (#12)**
- **Attracted by valued job opportunities (#14)**
- **Attracted by valued PD (#15)**
- **Attracted by/valued location (#17)**
- **Attracted by/valued professors (#22)**

Figure 4.1 – A Conceptual Model for Understanding Professional Development Activity Engagement

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The breakdown (by number of significant correlations and ANOVA results) within each category is shown below.

Table 4.9 – Number of Significant Correlations by Variable Set

| Variable Set | Number of Significant Correlations/ANOVA |
|---|---|
| Student Background | 2 |
| Pre-College | 4 |
| College-Related | 8 |
| Organization-Related | 4 |
| Professional Development Motivation | 7 |

If looking at the thirty independent variables individually (versus within the context of their variable set), the five strongest correlations are found within in the following variable sets as shown in Table 4.10.

Table 4.10 – Ranking of Significant Correlations by Individual Drivers

| Ranking of Significant Correlations | Driver of Engagement | Variable Set |
|---|---|---|
| 1 | Entering Status | Pre-College |
| 2 | Faculty Involvement | Professional Development Motivation |
| 3 | Live On/Near Campus | College-Related |
| 4 | HS Grades (limited data) | Pre-College |
| 5 | Center's Ease of Access | Organization-Related |

**Multiple Correlation Analysis**

As one additional correlational analysis, all of the variables listed above were entered into a step-wise multiple regression analysis. This analysis combines all of the variables into one linear combination and accounts for the fact that some of the variables correlate with each other. In a multiple regression, the final analysis indicates those variables which account for a significant proportion of the variance in the dependent variable, taking into account the correlations among the variables. This produced a highly significant multiple correlation (R = .528, $R^2$ = .279). There were four variables that met the inclusion criteria. The multiple regression using GPA with listwise deletion is as follows:

| | Variable | Beta | Significance |
|---|---|---|---|
| Step 1: | Status on entering Schumann (Pre-college Credentials) | -.334 | .000 |
| Step 2: | Number of faculty instrumental in professional development (Motivation, Expectations and Attraction) | .211 | .000 |
| Step 3: | Overall evaluation of PDC (Organization-related Factors) | .209 | .002 |
| Step 4: | High School GPA (Pre-college Credentials) | .131 | .015 |

Stated another way, those students who were most engaged entered Schumann as Freshman, believe that a larger number of faculty were involved in their professional development, have an overall better evaluation of the PDC, and had higher high school GPAs. These four variables, in combination, account for 27.9% of the variance in engagement.

## Non-Correlation Analysis

Several of the independent variables were nominal in nature and therefore were not suitable for regression analysis. Consequently, the series of variables not analyzed by correlation are presented below. The results are shown in Tables 4.11, 4.12 and 4.13 and include:

- Ethnicity
- Campus Attended
- Academic Major

Since the Native American and Hispanic groups were too small, they were combined with "Other" before running an ANOVA. The means of the remaining four groups are as follows:

Table 4.11 – Ethnicity

| Ethnicity | Mean |
| --- | --- |
| Asian | 52.08 |
| African American | 49.46 |
| White | 49.93 |
| Other | 49.04 |

The ANOVA was marginally significant ($F_{3, 860} = 3.392$, $p = .038$). As the means indicate, the Asian students were significantly higher than the other three groups. For ANOVA based statistics, the measure of effect size that is most commonly used is called partial eta squared. Similar to the effect size for correlations, a result is considered

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impactful if the partial eta squared is .10 or larger.  For the analysis of ethnicity, the partial eta squared equaled .012 which is a very small effect.

An ANOVA was also run on Campus Attended.  The sample sizes and means are as follows:

Table 4.12 – Campus Attended

| Campus | N | Mean |
|---|---|---|
| Montgomery County | 61 | 45.31 |
| Center City | 20 | 44.63 |
| Main | 764 | 50.67 |

The ANOVA was highly significant ($F_{2, 842}$ = 11.58, p = .000).  As the data show, the students that attended main campus had a significantly higher mean.  The small sample size for the non-Main campus groups makes this analysis a little suspect, but the data are fairly clear. In this case the effect size was .056 which is considered a small to medium effect.

To meet the assumptions for a parametric analysis, the academic majors were analyzed where only majors with 25 of more students were included in the analysis. All of the students in the various International Business majors (with specific program concentrations) were grouped into one category, and all other students in majors with less than 25 students were grouped into one category called "other."  The mean engagement scores for these academic majors are contained in Table 4.13.

Table 4.13 – Academic Majors

| Major | N | Mean |
| --- | --- | --- |
| Accounting | 159 | 50.36 |
| Finance | 154 | 48.03 |
| Human Resource Management | 60 | 47.99 |
| International Business | 103 | 52.25 |
| Legal Studies | 39 | 48.39 |
| Marketing | 175 | 50.22 |
| MIS | 33 | 49.78 |
| Risk Management & Insurance | 52 | 53.71 |
| All Others | 161 | 50.17 |

The ANOVA was highly significant (F 8, 855 = 3.70, p = .000). Descriptively, the highest mean was in the Risk Management & Insurance and the lowest mean was for Human Resource Management. For this analysis the effect size is .077 which is in the medium range.

**Additional Analyses**

Since the students' entering status (when starting their business education) had the highest correlation, this question was also analyzed using ANOVA in addition to the Pearson Correlation. The means of the group were as follows:

Table 4.14 – Entering Status

| Entering Status | N | Mean |
|---|---|---|
| Freshman | 412 | 52.83 |
| Transferred as Freshman | 43 | 54.59 |
| Transferred as Sophomore | 192 | 48.66 |
| Transferred as Junior | 201 | 45.51 |
| Transferred as Senior | 16 | 37.13 |

The ANOVA conducted on the above data was highly significant ($F_{4, 855}$ = 32.251, p = .000). The effect size in this case was .131 which is considered a large effect. This clearly shows that students who entered Schumann School of Business as a freshman or transferred as a freshman have higher engagement scores.

**Expectations**

The results supported most of the expectations, but not all.

Expectations:

| | |
|---|---|
| E1 | Females score higher than males on PDAE |
| E1 Results | Non-significant |
| | |
| E2 | Non-transfer students score higher than transfer students on PDAE |
| E2 Results | Significant |
| | |
| E3 | Faculty involvement leads to a higher PDAE |
| E3 Results | Significant |
| | |
| E4 | Hours worked per week negatively relates to PDAE |
| E4 Results | Non-significant |

**Summary**

This study attempted to identify factors that relate to student engagement in professional development activity. More specifically, the goal was to isolate specific drivers categorized within five variable sets. These variable sets ranged from student demographic items to academic information to organizational elements to student motivation.

By analyzing student satisfaction survey responses matched to student demographic data, the analyses showed that a combination of engagement drivers existed for this undergraduate business school population. Not all of the thirty drivers explored produced significant correlations. Instead twenty-five significant correlations and ANOVA results surfaced and were interspersed among the five variable sets identified at the start of this study. The most significant results were found in four of the five variable sets; however, the variable sets with the highest numbers of significant outcomes were from the middle to the proximal end of the conceptual model identified in this study. These were the variable sets that were anticipated to have the strongest effect on student engagement in professional development activity.

Despite this statistical significance, effect size had to be taken into consideration due to the large sample size ($N = 864$). Whereas there were many significant results, the most impactful drivers related to professional development activity engagement (PDAE) were those that met the benchmark of medium to large effect.

The above results reinforce the original premise that student engagement in professional development activity is driven by factors that are more complex than elements beyond one's control: birthdate, gender, ethnicity, and parental education. Conversely, it is the result of multiple drivers that appear to gravitate toward student effort, organizational impact, and more closely toward student motivation.

# CHAPTER 5

## REVIEW OF FINDINGS, IMPLICATIONS AND SUMMARY

Student engagement has become a subject of increasing interest and is the goal of many higher education institutions in light of its perceived role as an indicator of organizational excellence. Educators across a variety of programs and disciplines strive to understand how to create educationally effective services and activities that promote engagement. This study examined undergraduate business students' responses to a student satisfaction survey in an effort to identify drivers of engagement, specifically relative to participation in professional development activity. This study took place at a mid-Atlantic, urban research institution with an undergraduate business school population of approximately 5,700 students. Professional development is an important component of the academic experience at the Schumann School of Business. Despite integration of professional development into the undergraduate business curriculum via a dedicated professional development center and a mandatory one-credit course, student engagement levels vary. The intent was to identify possible "drivers" that might explain this variance in student professional development activity engagement (PDAE) levels.

Since formal centers dedicated to professional development are a relatively new academic model, the study utilized more established concepts for its context. The literature foundations used for this study consisted of historical perspectives of

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vocational/career counseling and college/university career center paradigms.  Student engagement comprised the third literature segment.

Researchers such as Astin posit that engagement is both a physical and psychological phenomena.  This study focused on the behavioral aspect of engagement similar to the approach used in the National Survey of Student Engagement (NSSE).  These behavioral measures became the dependent variable and were obtained from responses to the bi-annual mandatory Senior Student Satisfaction Survey (SSSS).  The independent variables were acquired from the University's student information system (ISIS) as well as certain elements of self-reported data in the SSSS.  Data analysis resulted in identifying the strongest correlates of engagement in student professional development activity.  Twenty-five of the thirty drivers analyzed were significant, although the large sample size rendered these essentially "meaningless."

This study also aimed to contribute to the literature gap related specifically to student engagement in professional development activity.  The topic of engagement has been widely researched; however, literature aimed at drivers or correlates of engagement leading to student participation in specialized services/resources is lacking.  "We need to know more about why some students, and some subgroups of students, disengage under certain circumstances and what to do to prevent that from happening" (Axelson & Flick, 2010).

**Summary of Findings**

The research question leading this study was "What drivers correlate with undergraduate business student engagement levels in professional development activity?" In other words, why are some students more engaged than others? Of the thirty drivers of engagement that were explored in this study, twenty-five produced significant correlations. Additional research questions focused on identifying descriptive "categories" of the above variables thought to be predictive of student engagement. This resulted in the creation of five variable sets ranging from basic student demographic data to more "fluid" items related to a student's motivation, expectations, and attraction to the university. These variable sets were labeled: 1) Student Background, 2) Pre-College Credentials, 3) College-Related Factors, 4) Organizational-Related Factors and 5) Motivation, Expectations and Attraction. The twenty-five significant correlations and ANOVA results are described below according to their corresponding variable set.

**Student Background Variable Set**

This set addressed basic student information and included age, gender, ethnicity and parental education. How did age affect engagement levels? This was the only significant factor identified by correlational analysis within the Student Background variable set. The negative correlation suggested that "older" or "mature" students are more engaged than their younger counterparts. This can be a result of their enhanced appreciation of professional development opportunities because life experiences have shown the importance of the above in relation to personal growth/career development. Interestingly, this finding is inconsistent with the research on "older" or non-traditional

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students.  The engagement literature typically assesses this group (24+) from the

perspective of a "transfer" student as compared to a simple numerical label.  Generally

speaking, this group is less engaged than traditional populations (Kuh, 2003), although

there are specific areas within NSSE where they do score higher than their peers (i.e.,

being more likely to be prepared for class).  The important differentiator between the

general engagement literature and this PDAE study is that is that this study was focused

on a specific type of engagement as compared to general "enriching" educational

experiences.


The other variable of interest in this Student Background category was ethnicity.

The ANOVA was marginally significant although the means indicated the Asian students

in this study were more engaged than the other ethnic groups.  This analysis does not

support research findings that have shown students from most racial groups were more

likely to be engaged than White and Asian Americans (Hu & Kuh, 2002).  The key point

is that literature tells us that student engagement is a result of the interaction between

student and the institution.  Ethnicity is an absolute student characteristic and therefore

cannot be changed.  This means that in order to promote higher levels of PDAE, the

emphasis should be on factors we *can* influence and the approach should be to "change

the perceptions that students have of the institutional environment" (Hu & Kuh, 2002).


**Pre-College Credentials Variable Set**

This set addressed academically-related characteristics that manifest themselves

prior to entering college.  The results in Chapter 4 showed that the most significant driver

of PDAE is a student's status when entering the Schumann School of Business. This was the strongest correlation (#1) of all thirty variables explored in this study. The negative correlation suggested that students who entered the University as first semester freshmen were more likely to be engaged in professional development activity as compared to their peers who transferred to Schumann. Research has shown that transfer students are typically less engaged than their peers. This group unfortunately has a shorter time to acclimate themselves to their new environment and to engage in campus experiences (Laanan, 2001). The heterogeneous composition of this population contributes to the complexity of understanding their unique needs and issues. Transfer students can be older, members of underrepresented racial-ethnic groups, and attend part-time (NSSE, 2011). Besides the diversity of this population, family and work obligations further complicate their situation. These commitments combined with spending time traveling to and from campus detract from available time for extracurricular activity.

The Schumann results are not surprising. Contrary to the transfer students, the group who entered as freshmen had more time and opportunities to learn about professional development services/resources. Whereas students might not fully engage their freshman year, they learn about these opportunities with the likely intent of "I should probably get involved in a student organization," or "I should complete an internship." Starting their first semester, these students receive ongoing and consistent messages from faculty and staff about the importance of internships, career preparation, and the advantages of involvement with the professional development center. This finding is certainly not unanticipated, but it highlights an important benefit of entering the

university as a freshman.  It also draws our attention to the need for addressing those students who are not in this category by crafting relevant transfer student programs/services along with targeted marketing strategies.

College success is thought to be related to pre-college academics as well as other factors (Kuh et al., 2007).  Equally unsurprising and consistent with the literature on student engagement, there was a positive correlation between higher high school GPAs and engagement (the 4th strongest correlation).  Even though the sample size of available high school academic data was small (HS GPAs were available only on 10.8% of the sample), this was a noteworthy finding as this was also consistent with the discovery that students who had higher cumulative college GPAs (variable set #3 – College-Related category) had higher engagement levels.  Research has looked at student ability (academic preparation) and its effect on college outcomes (Pascarella & Terenzini, 1991). The finding of this study that higher HS and college grades positively correlated to higher PDAE supports literature that states that student engagement appears to be positively influenced by better academic preparation and performance.

The year a student entered college suggests that those students who started an academic program in more recent years were more engaged (#18/25).  A student who entered college several years ago is most likely someone who is returning to school after a hiatus, completing his/her education on a part-time basis (because of competing obligations), or is not on a plan to complete his/her program in the least amount of time possible due to financial constraints.  Whatever the reason is for these students'

"extended" course of study, this group may not have as much time to participate in professional development services. The perception is that non-school obligations are far more important than the voluntary or supplemental student services (Astin, 1984). Another possible explanation is that they may be completing their degree on a part-time basis since they are already gainfully employed and therefore feel they do not need these types of "supplemental" professional development student services. This lack of engagement may be related to an "information gap" coupled with the perception that the ROI in educationally purposeful activity is minimal (Hagedorn, 2005).

Despite the limited SAT data (scores were available for only 64.5%); there was a small, but positive correlation between both Verbal and Math scores and student engagement (#21/25). This can be considered similar to the finding that students with higher high school and college GPAs had higher engagement scores. Based on the study results, strong academic performance tends to lead to participation in professional development activity as discussed earlier.

**College-Related Variable Set**

This variable set included college academic components as well as living arrangements. The number of semesters in which a student lives on or near campus positively correlates to engagement. Of the twenty-five significant variables, this was the third strongest correlation. This is consistent with literature that suggests on-campus living is positively related to engagement (Pascarella & Terenzini, 2005). When students spend more time on campus; they have more opportunities to become engaged in student

professional organization activity as they have more time to attend meetings and participate in events. Also, by being on campus (or in close proximity), they can more easily attend professional development workshops, utilize the resume critique services, and participate in employer networking/recruiting events which are held on-campus. Since commuter students are a growing group at many schools, it is important to take note of their unique challenges as many of them view campus as a place to simply "visit." Their varying life circumstances create distinctions between them and residential students (Jacoby & Garland, 2005). As shown in the Schumann study, these multiple roles commuters play can interfere with their ability to fully utilize campus resources such as the PDC.

Cumulative college GPA was the next strongest driver within this "College-Related" category (#6/25). Students with higher college grades had higher engagement scores. This is consistent with the Schumann finding on HS GPA and SAT scores discussed earlier. Stronger academic performance tends to translate to higher engagement levels. An alternative perspective is that students with lower GPAs might need to concentrate more on their academics and therefore do not have time to spend on non-academic activities. The staff at the PDC has often advised students to focus on improving their grades before looking for an internship. This is in light of the time management needed to balance the responsibilities of coursework and employment. In addition to a student's decision to refrain from participating, an involuntary roadblock might be present. The reality is that a majority of internships have GPA requirements. Consequently, a student with a lower GPA (although interested in pursuing an internship)

may not be academically qualified to even apply for a particular opening. This would negatively impact their engagement level since participation in internships is a behavioral manifestation of engagement in this study. This is extremely unfortunate since completion of an internship typically leads to better success with the senior job search. From an employer perspective, the lack of internship experience coupled with poor academic performance is a double jeopardy for students with low GPAs. Especially during tough economic times, when many candidates are seeking employment, hiring organizations can be extremely selective. Efforts to assist this particular group of students with this dilemma are needed, but it is a complex issue and easy solutions are not readily available. A multi-faceted strategy along with patience, encouragement and consistent efforts are needed to get these students into the workforce.

Consistent with the above is participation in the honors program (#7/25). Since honors students have very high GPAs, the line of reasoning (and inferences from literature) used above that higher GPAs translate to higher engagement levels applies here as well.

The number of "hours attempted" was not originally identified as a potential driver of engagement, but was included in the analysis since it was part of the student background data obtained via ISIS. Hours attempted refers to the total number of credit hours for which a student registers. Surprisingly, it was one of the significant correlations (#9/25). One interpretation is that these students are more ambitious and therefore take additional credits beyond the requirements for graduation. This ambition

can also be a motivator for participation in activities related to professional development. An alternate (and more realistic) perspective is that the more credits a person takes simply means they have spent more time at Schumann and had more time to engage in PDC services and resources.

The primary status (full-time versus part-time) while attending the Schumann School indicated that there was a significant correlation between status and engagement (#16/25).  The analysis suggested that full-time students are more engaged in professional development activity.  This is to be expected since taking a full load of classes means they will be spending more time on campus and this increases the likelihood of more fully utilizing campus resources such as the Professional Development Center (PDC). Part-time students are one of the four populations thought to be historically "underserved" in comparison to traditional students.  The other three groups are commuter, transfer and returning (Harper & Quaye, 2009).  Factors affecting these part-time students may include "multiple life roles - family obligations, full-time jobs" (Banning & Hughes, 1986, Jacoby, 2006b).  These "additions" to the daily routine are likely to impede PDAE.  There may be an interest in participating, but the realities of life combined with a finite number of hours in a day, make engagement difficult.

A positive correlation (although low - #20/25) exists between BA2101 grade and engagement.  Since this is the professional development course offered by the PDC, students who take the course more seriously are likely to achieve a higher grade.  They are then more likely to participate in the services and resources discussed in the class.

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Since the BA2101 grades are somewhat homogeneous (85% of the grades were A or A-),
this finding might not have much relevance.

Campus attended was also identified as a contributor to engagement. The
ANOVA showed that main campus students had a significantly higher mean. This is not
surprising as the professional development center is located on the main campus with
limited offerings at the other campuses. This result supports the Barton et al., 2009
research that stated, "Students on branch campuses tend to identify more closely with
their local branch than with the main campus." Whereas valuable resources and
opportunities may exist at another campus, many students display a tendency to stay
within their comfort zone. This reluctance to venture into unknown territory would
impede their likelihood of traveling to the main campus to utilize the "full" array of PDC
services and as a result, they may settle for the abbreviated services offered once a week
at the branch campuses.

Academic major is the last variable to discuss in the College-Related variable set.
The analysis showed significant differences in engagement level according to major. The
major with the highest engagement score was Risk Management & Insurance. The major
with the least engaged students was Human Resource Management. One of the
expectations students (and their parents) have of the institution is to prepare them for the
world of work...desirably within one's field of study. The NSSE 2011 report revealed
that self-reported gains in work-related knowledge and skills differed greatly among
major field categories. Students in the more career-oriented fields such as education and

business perceived higher gains in work-related knowledge and skills. This correlates to the student in the Schumann study. The Risk Management majors have the most integrated professional development program of all the Schumann Business majors. Besides the services of PDC, the faculty and administration within this major emphasize preparation for life beyond graduation and strongly encourage involvement in the major's SPO. These students are very focused and it is not surprising that they scored highest on PDAE. On the other end of the engagement spectrum, we see the Human Resource Management majors. One of the biggest challenges they face is the lack of understanding related to suitable entry-level careers. They often have unrealistic expectations about their "first job." When they do not see a multitude of what they perceive to be "ideal" job opportunities posted on JobNet (PDC's career management system), they have a tendency to disengage and not take advantage of the PDC job leads and on-campus recruiting opportunities. These results show the importance of gauging student perceptions regarding suitable career opportunities as well as the value of having the academic department involved in the professional development mentoring/coaching of their majors.

**Organization-Related Variable Set**

This variable set focused on the institution. The fifth strongest variable within the Schumann study was ease of access of the Professional Development Center (PDC). Students who rated the Center more highly had higher engagement scores. This driver of engagement relates to the impact that organizational culture has on the student. Student engagement is believed to be a result of two factors: the time and energy students devote

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to educationally purposeful activities as well as their perceptions of the institutional environment that facilitate and support their learning (Gonyea, 2006). It is the second factor that is being addressed by this variable. Services/resources that are perceived to be readily accessible increase the likelihood that a student will take advantage and become engaged.

Next in this category was the perceived quality of service provided by the PDC (#8/25). Students who more positively rated the Center as meeting their needs had higher engagement scores. Similar to the rating on ease of access of the PDC, this component looks at the importance of the student service unit in meeting expectations of its student users. If students believe that a center or service can add value to their academic/collegiate experience, they are more inclined to utilize the resource(s). According to Astin, (1985, p. 36), "the effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement." Students who rated the Center more highly (both ease of access and quality of service) had higher dependent variable scores related to engagement.

In a similar fashion, the analysis showed there was a positive correlation between overall satisfaction with the BBA program and higher engagement scores (#13/25). There are many references to suggest that the design and implementation of "quality" programs (i.e., orientation, first-year seminars, learning communities, intrusive advising, on-campus work and internships) are critical (Forest, 1985, Kuh et al., 2005; Kuh et al., 2007; Wang & Grimes, 2001). This SSSS question did not address specific BBA

programs but was a general inquiry of overall satisfaction. Since the engagement scores were higher, this supports the notion that "quality" leads to satisfaction and that spurs engagement.

Finally, within this category, there was a small but significant correlation between students feeling challenged by their major's requirements and PDAE (#19/25). Level of Academic Challenge and Active and Collaborative Learning were two of the five NSSE benchmarks of "effective educational practice." These elements are a critical component of student learning and collegiate quality (NSSE, 2011). It is speculated that the Schumann students who were satisfied with the BBA program most likely felt challenged and appreciated the high expectations set by the school. This satisfaction then positively correlated to PDAE.

**Motivation, Expectations and Attraction Variable Set**

This set focuses on the unique combination of a student's motivation and expectations of the institution. The second most significant correlation in this study was the involvement of faculty in a student's professional development. Faculty involvement was considered a "motivational" factor for the Schumann study as most students value the wisdom and expertise of their faculty members. In addition, faculty have the most direct student contact as compared to student service staff so their opportunity to "influence and inspire" is increased. Many researchers (Astin, 1993; Ewell & Jones, 1996; Pascarella & Terenzini, 1991; Tinto, 1993, 2000) have shown the impact of faculty - student interaction as it relates to enhanced student learning. This includes both formal

and informal interactions that positively affect persistence and can translate to student engagement.

Literature suggests that freshman as well as seniors show higher engagement levels when faculty "place a high level of importance on participation in enriching educational experiences" (Umbach & Wawrzynski, 2005). The activities promoted by the PDC (i.e., internships, SPO involvement, industry research, etc.) can be interpreted as examples of these enriching experiences. Students typically see this faculty encouragement (to participate) as a form of care for their growth and development. According to the NSSE 2011 Annual Report, 83% of the seniors surveyed had a conversation with a faculty member/advisor about their career plans, and 75% perceived substantial gains in work-related knowledge and skills.

Research related to faculty and student engagement has shown that "faculty do matter" (Umbach & Wawrzynski, (2005). Their actions and attitudes create a context for learning and this tends to impact growth and engagement. If the goal is to increase student PDAE, then attention should be directed to take a closer look at faculty involvement to perhaps identify "which" practices are successful in promoting learning, persistence, and engagement and "what" are the best ways to deliver these practices.

The next two significant correlations in rank order within this category were related to reasons a student chose to attend the Schumann School of Business. First was an attraction to study abroad opportunities (#11/25) followed by academic scholarship

(#12/25).  Both of these were a little harder to explain since they do not directly relate to professional development activity; however, preparation to work in a global economy is an important component of many business schools.  Global awareness and preparation for intercultural understanding and internationalization will be increasingly necessary.  NSSE 2011 showed that institutions with "high global awareness engagement" had students who were more engaged, and were more likely to use deep approaches to learning. Perhaps these selling features of the school can be considered to be excellent opportunities to expand oneself professionally therefore relating to professional development.  This also aligns with the notion that when "expectations" (that the student has of the organization) are met, participation is more likely to occur (engagement). Students enter college with expectations (Zemsky & Oedel, 1983) that act as a "gauge" to assess early experiences with the school's academic and social communities (Tinto, 1987, 1993).  Unmet expectations lead to "disenchantment" and that can negatively affect future interactions with the organization.  In other words, they may feel they were "mislead" and do not want to commit further time/energy to the school.  In terms of the Motivation, Attraction and Expectations variable set, this suggests they had high expectations (rated these items highly on the SSSS) and then when those expectations were met by Schumann, they were more likely to engage as shown by their higher PDAE scores.

Similar to the reasons a student chose to attend the Schumann School mentioned above (study abroad, academic scholarship), the enticement of job opportunities, as well as formal professional development opportunities offered by the Schumann School were

positively related to the level of engagement (#14 & #15).  The "placement" and "planning" philosophies described in the relevant career services literature support this finding.  Whereas all of the PDC services are intended to be valuable tools, on-campus recruiting and job placement are usually the most visible functions (Rayman, 1993).  The goal of the Center is to serve as a supplement to the academic portion of the education experience, and by dedicating resources to professional development; Schumann optimizes students' readiness for the world of work.  This component of the Schumann experience fosters career progress while emphasizing business savvy, professionalism and the soft skills (i.e., teamwork, interpersonal, and leadership skills, etc.) necessary to maintain a competitive edge in business and industry.  The goal of highlighting drivers of engagement in professional development supports Casella's (1990) networking model.  This paradigm suggests that students need to be active participants and should take ownership of their career development process.  By identifying the relevant drivers, the PDC should be more effective in enticing students to participate.

Congruent with the previous items that attracted students to the Schumann School, location was a factor. (#17/25)  Students who rated the school's location more highly had higher engagement scores.  Two of the five NSSE benchmarks of "effective educational practice" are Enriching Educational Experiences and Supportive Campus Environments.  The services and resources provided by Schumann's PDC can be described as both enriching and supportive.  Students who are attracted to a school that offers and implements such practices are more likely to engage with the relevant professional development programs.  The urban location of Schumann is ideal for easily

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bringing employers and corporate partners to campus for speaking engagements, participation in PDC events, and job/internship recruiting. Schools located in certain rural areas may be hundreds of miles from business and industry and therefore may be a deterrent for business school applicants seeking opportunities to connect with "Corporate America." This attraction to location is therefore consistent with higher PDAE.

Finally within this category, there was a small, but positive correlation between students viewing faculty as a reason for choosing to attend the Schumann School and PDAE (#22/25). Students who were attracted to Schumann by the professors scored higher on the professional development engagement variables. Since students who are more engaged had one or more faculty involved in their professional development, this is not surprising that they would be attracted by, and would choose to attend the Schumann School because of faculty reputation. Literature abundantly tells us that student-faculty interaction is another indicator of effective educational practice. Similar to the attraction for location mentioned above, an attraction to a school with well-respected faculty corresponds with a proclivity to more fully utilize resources thought to be related to growth and development.

**Overall Summary**

Of the thirty drivers of engagement that were explored in this PDAE study, twenty-five produced significant correlations. The most significant correlations and ANOVA results in this engagement study were found in four of the five variable sets; however, the variable sets with the highest numbers of correlations and AVOVA were at

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the proximal end of the conceptual model identified in this study. These were the variable sets that were anticipated to have the strongest effect on student engagement in professional development activity. Despite this clustering toward the proximal end, the most significant correlations were not exclusive to one category. In addition, the numerical order of the correlations did not necessarily match the original distal to proximal variable flow anticipated to be the case. In other words, the strongest correlations were not solely in the "Motivation, Expectations and Attraction" variable set; however, most of these significant correlations were interspersed between the 2nd, 3rd, 4th, and 5th variable sets.

Although data analysis resulted in identifying twenty-five statistically significant variables, effect size had to be taken into consideration due to the large sample size (N = 864). There were many significant results; however, the most impactful drivers related to professional development activity engagement (PDAE) were those that met the benchmark of medium to large effect. Using this target of medium to large effect, the most influential variables were entering status and faculty involvement.

Whereas the above finding may not be considered "groundbreaking" from a research standpoint, the overall results of the Schumann study can add value. The results support the expectation that Student Background is not as predictive of student engagement in professional development activity as Pre-College, College-Related, Organization-Related and Motivation, Expectations and Attraction factors. This further emphasizes that these results showed that there is not a singular overriding category

responsible for being the sole driver of engagement.  Instead, multiple factors are

ultimately involved in this complex model of PDAE.  Literature has indicated that there

are varying definitions of the term engagement, differing thoughts on who is responsible,

as well as a lack of understanding of what specific student factors are involved.  This

complexity is supported by the large numbers of significant correlations in this study,

coupled with the consequence of effect size.  In order to increase engagement in

professional development activity at Schumann (to enhance the quality of its business

graduates), a comprehensive strategy starting with efforts aimed at transfer students is

warranted.

**Implications for Practice**

What are the implications of this study for university administrators?   Since

educationally purposeful activities are positively linked to desired outcomes for college

students, efforts to identify ways to increase student PDAE (in these activities) is

important.  Research on student engagement has shown us that students who are

challenged to perform at high levels, interact closely with faculty, and receive regular

performance feedback are more satisfied and more likely to persist.  Unfortunately not all

students avail themselves to the important resources and opportunities that contribute to

these activities that can add significant value to their collegiate experience.

Professional development can be viewed as extremely relevant to these

"educationally purposeful" activities and is linked to enhanced career success upon

graduation.  The philosophy of many business schools is that professional development is

an important component of the student's total academic experience. Speculation suggests that participation in such programs leads to enhanced success of its graduates thereby reflecting well on the school and students. This "success" is important to the reputation of the school and is used in rankings as well as marketing efforts to prospective students and parents. Additionally, employers look at the caliber of graduates to establish target schools for future recruitment efforts. In light of this critical role, it is necessary to increase our understanding of the student and institutional factors that induce participation and engagement in "demonstrably effective programs and practices."

If focusing on the top three drivers of engagement in professional development activity identified in this study, this means attention should be paid to transfer status, faculty involvement, and residential status. Since students who enter as freshman are more likely to be engaged, the creation of programming specifically aimed at transfer students is important. Their time at the university is abbreviated compared to their non-transfer-peers, so initiatives to strengthen their understanding of the importance, as well as encouragement for involvement in professional development activity, should be implemented. Since professional development is seen as an important component of their collegiate experience, special programming for this population should be a consideration.

Faculty Involvement was identified as the second strongest contributor to student engagement in professional development activity. Consequently, exploration of how to incorporate faculty into formal professional development activity is worthwhile. Most professional development centers are staffed by university/college administrators. This

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relevance of faculty involvement to engagement should fuel open communication and collaboration (between faculty and staff) as appropriate. Overcoming the occasional divide between faculty and administration is needed to collaborate with faculty regarding available student services/resources and to involve them in the professional and career development center's initiatives. Faculty can be strong supporters of these programs and they can be extremely valuable in encouraging students to participate in services and utilize resources in light of their influential role with students.

Residential status (living on/near campus) had a significant effect on student engagement in professional development activity. This is particularly relevant to institutions that have large commuter populations. Exploration of flexible programming aligned with virtual resources can perhaps bridge the gap between engagement levels of those who spend more time on campus than those who commute. Pre-recorded seminars, extended hours, as well as video interviews with prospective employers are examples of such activity.

<div align="center">**Limitations**</div>

With the exception of academic advising or financial aid, students can often complete their degree without utilizing "support" services (e.g., career services, counseling center, student activities, leadership development programs, etc.). The difference in this study population is that the professional development center (a support service) and their professional development strategies course is a mandatory component of the Schumann School academic experience. Eventually, students have to complete the

one-credit course in order to graduate.  This mandatory component and/or integration into the academic curriculum is not typical of all professional development or career centers; therefore the results will not be generalizable to all undergraduate business programs, non-business undergraduate students, graduate business students or job seekers served by traditional non-mandatory career service operations.

This study focused on engagement in professional development activity-related services provided by a center (housed within an academic unit) dedicated exclusively to this activity.  Whereas similarities exist between such centers and university career centers, there are differences in the service provisions, organizational structure, administrative oversight/reporting lines, culture/environment, leadership and theoretical orientations.  Consequently, whereas these findings might provide some insight into what types of students might more fully engage in career services, the assumption cannot be made that the findings here might apply to all centralized university/college career centers.

## Recommendations for Future Research

In order to validate the self-reported SSSS data, the inclusion of record-based information would be a first step for expanding the data collection.  A number of items in the JobNet database would supplement the SBEM (student behavioral engagement measures) data.  These items would include: internship activity, workshop attendance, job/internship applications to PDC postings, on-campus interviews, and attendance at

major employer networking events. It would be interesting to see how closely the self-reported data aligned with the record-based information.

Secondly, the Senior Student Satisfaction Survey (SSSS) was selected for its high completion rate. Unfortunately, the SSSS does not solely concentrate on professional development. The focus of the survey is on overall student satisfaction with the curriculum and student services. Despite the inclusion of four new "professional development" questions in addition to the existing survey questions that dealt with usage of relevant services, the SSSS was not created specifically for this study. A recommendation is to explore the design/implementation of a specific professional development or PDAE survey to focus on the topic of engagement. Comparable completion rates (to the SSSS) would be the challenge therefore exploration of ways to mandate this new survey, incorporate it into an existing activity, or entice participation would be necessary. Since the BA2101 Professional Development course administered by the PDC is required, this is the most logical avenue to explore first. Completion of the PDAE survey could be a course requirement. Other "passive embedded" ways to assess engagement levels would be to survey PDC workshop participants who attend one of the Center's introductory sessions. Identifying which students take advantage of these workshops "sooner than later" would provide some useful insight as to what drives a student to participate.

The Schumann study focused on "outward" behavioral manifestations of engagement (SPO involvement, professional development workshop attendance,

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completion of internships, etc.).  This approach facilitates measurement, but it does not

incorporate non-physical measures such as cognitive or emotional aspects.  To explore

the "inward" facets of engagement, further research should examine a student's "desire"

to participate in professional development activity with the goal of unearthing possible

explanations as to why their "interest" did not result in actual (or measurable)

participation.  Perhaps issues such as low-self-confidence or limited understanding of

processes related to how to get involved would surface, thereby explaining the lack of

behavioral manifestations.  In order to tap into a more multi-dimensional

concept/construct, crafting new questions (or methods) to address the psychological

(cognitive and emotional) features of student engagement is warranted.


Additional options to consider for further research include combining information

obtained from the University's NSSE results and the "New Student Questionnaire" with

the Schumann data.  The "New Student" survey incorporates questions related to a

student's self-assessment of personality type variables.  It is my belief that a student's

personality is going to have the strongest impact on engagement in professional

development activity as compared to demographics.  This was the original assumption

prior to this study and the results supported the hypothesis that student engagement is the

result of multiple factors and is more complex than gender, ethnicity and socio-economic

status.  A possible avenue to explore the personality component of engagement is to take

a qualitative approach and conduct in-depth interviews with students.  This might reveal

the underlying factors that motivate students as well as reveal personality patterns that

might foster PDAE.  This approach might be combined with utilization of a motivation

scale survey.  Quantitative measures of motivational strength and type (i.e. extrinsic versus intrinsic) would be an enlightening complement to the personality variable.

## Conclusion

The driving force behind his study was born out of a curiosity that plagues most university administrators at some point or another in their careers.  What differentiates certain students in terms of their proclivity to enthusiastically embrace and utilize services from others who appear marginally active and sometimes complacent?  The goal was to determine the demographic, organizational, and motivational drivers that serve as potential initiators of variance in engagement levels related to professional development activity (PDAE).

Twenty-five factors (of varying weight) were identified as having an effect on engagement in professional development activity.  Not surprising, these twenty-five variables were a combination of drivers from all five variable sets described in this study.  Whereas the proximal end of the conceptual model housed the most drivers, there was not a clear-cut, singular category that contributed to professional development engagement.  This finding did meet the expectations that student engagement is driven by a more complex combination of factors other than student demographics.  Conversely, multiple factors are ultimately involved in this complex model of student engagement in professional development activity.

The issue of student engagement sparks the question of "who" is responsible since student effort as well as institutional performance is intertwined in this concept. This study sought not to place accountability on one or the other, but to focus on a more productive question as to what drivers promote student engagement. The ultimate goal was to increase participation in professional development activity to aid students in becoming more viable candidates for post-graduate employment. Increased placement levels translate well into alumni satisfaction, improved business school rankings and consequently enhance the school's reputation. A better understanding of why certain students are inclined to participate will be useful in creating strategies to attract new students as well as maintain optimal participation of current users. Based on the research presented in this study, the most notable items for consideration when crafting strategies to foster professional development engagement include paying close attention to transfer students, incorporating faculty into the Center's initiatives, and implementing flexible professional development programming for off-campus students. Further exploration of these variables should result in the creation of strategies to increase organizational effectiveness while meeting high performance goals of both students and the administration.

The secondary and perhaps more far-reaching benefit of increasing engagement extends beyond the days, weeks and years a student spends at Schumann. The Center's model of professional development is based on philosophy of continuous improvement and encourages students to view their professional development as a life-long journey. By increasing engagement *during* their time at Schumann, hopefully this will inspire

them to commit to a long-term investment in their learning and personal growth *after*

they leave the institution.

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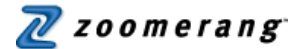
# Fall 2010 Senior Student Satisfaction Survey

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**Fall 2010 Senior Student Satisfaction Survey**

Page 1 - Question 1 - Choice - One Answer (Drop Down)                                      [Mandatory]

What was your primary status while attending Schumann?

- ○ Full-time
- ○ Part-time

Page 1 - Question 2 - Choice - One Answer (Drop Down)                                      [Mandatory]

What was your status entering Schumann?

- ○ Entered as 1st semester Freshman
- ○ Transferred as Freshman
- ○ Transferred as Sophomore
- ○ Transferred as Junior
- ○ Transferred as Senior

Page 1 - Question 3 - Choice - One Answer (Drop Down)                                      [Mandatory]

What year did you enter college? (University, Community College, etc.)

- ○ 2010
- ○ 2009
- ○ 2008
- ○ 2007
- ○ 2006
- ○ 2005
- ○ 2004
- ○ 2003
- ○ 2002
- ○ 2001
- ○ 2000
- ○ 1999
- ○ 1998
- ○ 1997
- ○ 1996
- ○ 1995
- ○ 1994
- ○ 1993

○ 1992
○ 1991
○ 1990
○ 1989
○ 1987
○ 1986
○ 1985
○ 1984
○ 1983
○ 1982
○ 1981
○ 1980
○ before 1980

Page 1 - Question 4 - Rating Scale - Matrix [Mandatory]

Using a 1-10 scale where 1=Not at all a factor and 10=most important factor, please rate the following items by importance for why you chose to attend the Schumann School of Business:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Academic Scholarship | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Cost | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Diversity | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Financial Aid | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Job opportunities | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Location | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Professors | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Formal Professional Development Opportunities | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Recommendation from friends | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Recommendation from parents/family | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Reputation of the Schumann School of Business | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Specific majors | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Study abroad program | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

Page 1 - Question 5 - Choice - One Answer (Drop Down) [Mandatory]

At which of the following campuses did you complete most of your courses?

○ Main
○ Montgomery County
○ Center City
○ Other

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How many semesters did you live on or near campus at Schumann?

- ○ None
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8
- ○ 9
- ○ 10

Were you a participant in the honors program?

- ○ Yes
- ○ No

What is your major?

- ○ Accounting
- ○ Actuarial Science
- ○ Business Management
- ○ Economics
- ○ Entrepreneurship
- ○ Finance
- ○ Human Resource Management
- ○ Legal Studies
- ○ M.I.S.
- ○ Marketing
- ○ Real Estate
- ○ Risk Management and Insurance
- ○ International Business / Accounting
- ○ International Business / Actuarial Science
- ○ International Business / Business Management
- ○ International Business / Economics
- ○ International Business / Entrepreneurship
- ○ International Business / Finance
- ○ International Business / Human Resource Management
- ○ International Business / Legal Studies
- ○ International Business / M.I.S.
- ○ International Business / Marketing
- ○ International Business / Real Estate
- ○ International Business / Risk Management and Insurance
- ○ Other

If you double majored, what is your other major?

- ○ N/A
- ○ Accounting
- ○ Actuarial Science
- ○ Business Management
- ○ Economics
- ○ Entrepreneurship
- ○ Finance
- ○ Human Resource Management
- ○ Legal Studies
- ○ M.I.S.
- ○ Marketing
- ○ Real Estate
- ○ Risk Management and Insurance
- ○ International Business / Accounting
- ○ International Business / Actuarial Science
- ○ International Business / Business Management
- ○ International Business / Economics
- ○ International Business / Entrepreneurship
- ○ International Business / Finance
- ○ International Business / Human Resource Management
- ○ International Business / Legal Studies
- ○ International Business / M.I.S.
- ○ International Business / Marketing
- ○ International Business / Real Estate
- ○ International Business / Risk Management and Insurance
- ○ Other

What is the highest level of education completed by either of your parents?

- ○ Some High-school
- ○ High-school diploma / G.E.D
- ○ Some college
- ○ Associates degree
- ○ 4 year degree
- ○ Graduate or Professional degree

What is your cumulative grade point average?

- ○ 2.0 or below
- ○ 2.1
- ○ 2.2
- ○ 2.3
- ○ 2.4
- ○ 2.5
- ○ 2.6
- ○ 2.7

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- ○ 2.8
- ○ 2.9
- ○ 3.0
- ○ 3.1
- ○ 3.2
- ○ 3.3
- ○ 3.4
- ○ 3.5
- ○ 3.6
- ○ 3.7
- ○ 3.8
- ○ 3.9
- ○ 4.0

Page 1 - Question 12 - Choice - One Answer (Drop Down) [Mandatory]

On average, how many hours per week do you spend doing any kind of work related to your courses outside of the regular classroom time? (Ex: reading, group meetings, papers, research)

- ○ 0
- ○ 1-5
- ○ 6-10
- ○ 11-15
- ○ 16-20
- ○ 21-25
- ○ 26-30
- ○ 31-35
- ○ 36 or more

Page 1 - Question 13 - Choice - One Answer (Drop Down) [Mandatory]

In the last year, on average, how many hours per week have you worked for pay (include unpaid work in a family business).

- ○ 0
- ○ 1-5
- ○ 6-10
- ○ 11-15
- ○ 16-20
- ○ 21-25
- ○ 26-30
- ○ 31-35
- ○ 36 or more

Page 1 - Question 14 - Choice - One Answer (Drop Down) [Mandatory]

When did you first join a Schumann student professional development organization (SPO)?

- ○ Never Joined
- ○ As Freshman
- ○ As Sophomore
- ○ As Junior
- ○ As Senior

How many Student Professional Organization (SPO) meetings do you attend on average during a semester?

- ○ None
- ○ 1 per semester
- ○ 2 per semester
- ○ 3 per semester
- ○ 4 per semester
- ○ 5 per semester
- ○ 6 per semester
- ○ 7 per semester
- ○ 8 per semester
- ○ 9 per semester
- ○ 10 per semester
- ○ 11 per semester
- ○ 12 per semester
- ○ More than 12

Which of the following Professional Development Center (PDC) services/programs/resources did you utilize?  (Check all that apply)

- ❏ Non-required PDC workshops (Business Etiquette, Job Search Strategies, Was it Something I Said?, Researching Companies, etc.)
- ❏ Multiple PDC Resume Critique(s) (includes Employer Resume Critiques)
- ❏ JobNet for job/internship applications
- ❏ On-campus Recruiting
- ❏ Professional Development activities through SPOs
- ❏ Senior Reception (September)
- ❏ Spring Connection (February)
- ❏ Employer Industry (Mock) Interviews
- ❏ Reported my internship or FT job offer to PDC
- ❏ PDC Blackboard Organization resources

Using a six-point rating scale with 1=Not at all engaged and 6=very engaged, please rate your level of engagement with professional development resources at the Schumann School (e.g., PDC, SPOs, faculty)?

| Not engaged at all | 2 | 3 | 4 | 5 | Very engaged |
|---|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ | ○ |

When did you become PDC'd (via either completion of BA2101 or completion of the "required" PDC workshops:  Getting Started, Resume Development, Resume Critique)?

- ○ Freshman year
- ○ Sophomore year
- ○ Junior year
- ○ Senior year

Page 1 - Question 19 - Choice - One Answer (Drop Down)                                    [Mandatory]

How many faculty members were instrumental in your professional development?

- ○ none
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

Page 1 - Question 20 - Choice - One Answer (Drop Down)                                    [Mandatory]

How many formal internships or co-ops did you participate in while a student at Schumann?

- ○ None
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ more than 4

Page 1 - Question 21 - Choice - One Answer (Drop Down)                                    [Mandatory]

If you have participated in a formal internship or co-op, how did you obtain that internship?

- ○ Through a Student Professional Organization (SPO)
- ○ Through Schumann's Professional Development Center (PDC)
- ○ Through the University's Career Services Office
- ○ Through a Professor or Class
- ○ On your own
- ○ Did not pursue a formal internship
- ○ Did not secure a formal internship
- ○ Did not participate in a formal internship because I have a part-time job
- ○ Did not participate in a formal internship because I have a full-time job

Page 1 - Question 22 - Choice - One Answer (Drop Down)                                    [Mandatory]

Over the last two years, how many times did you meet with an academic advisor?

- ○ One
- ○ Two
- ○ Three
- ○ Four
- ○ Five
- ○ Six
- ○ Seven or more

Page 1 - Question 23 - Rating Scale - One Answer (Horizontal)                              [Mandatory]

Overall, how satisfied are you with the Schumann BBA program?

| Very dissatisfied | Somewhat dissatisfied | A little satisfied | Satisfied | Very satisfied |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

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According to your experiences, please evaluate each administrative and support unit on the following dimensions---EASE OF ACCESS---You could find out about and use the service or office with little difficulty.

| | Strongly Disagree | Disagree | Somewhat agree | Agree | Strongly Agree | N / A |
|---|---|---|---|---|---|---|
| Undergraduate Academic Advising | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Professional Development Center (PDC) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Student Financial Services | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| University Career Services | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

According to your experiences please evaluate each administrative and support unit on the following dimensions---QUALITY OF SERVICE PROVIDED BY THE UNIT---your needs were taken care of.

| | Strongly disagree | Disagree | Somewhat agree | Agree | Strongly agree | N / A |
|---|---|---|---|---|---|---|
| Undergraduate Academic Advising | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Professional Development Center(PDC) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Student Financial Services | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| University Career Services | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

Please indicate the level to which you felt challenged in each of the following areas:

| | Not at all challenged | 2 | Somewhat challenged | 4 | Very much challenged | N/A (applicable for Lower Division only) |
|---|---|---|---|---|---|---|
| Lower-Division Business Core | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Upper-Division Business Core | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Major Requirements | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| BA 4196: Global Business Policies | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

For each of the following areas, please indicate the extent to which you believe that ethics was covered adequately:

| | Not at all | 2 | Moderate | 4 | Very well | N/A (applicable for Lower Division only) |
|---|---|---|---|---|---|---|
| Lower-Division Business Core | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Upper-Division Business Core | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Major Courses | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| BA 4196: Global Business Policies | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| University Core - (non-business classes) | ○ | ○ | ○ | ○ | ○ | ○ |

[Mandatory]

How much case analysis was included in your major.

| None at all | 2 | A Few Cases | 4 | A Lot of Cases |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

[Mandatory]

What is the one thing you would like to see improved in the curriculum for your "Business Core requirements?"

[Mandatory]

What is the one thing you would like to see improved in the curriculum for your major?

[Mandatory]

What was the best part of your Schumann undergraduate business experience?

[Mandatory]

The reputation of the Schumann School influences your market value to potential employers.

| Strongly disagree | Disagree | Somewhat agree | Agree | Strongly agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |