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SELF-EFFICACY BELIEFS, FACULTY EXPECTATIONS, AND INSTITUTIONAL CLIMATE AS DETERMINANTS OF ACADEMIC ACHIEVEMENT IN BUSINESS STUDENTS

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This article models the influence of students' generalized self-efficacy, faculty expectations, and institutional climate on students' academic self-efficacy beliefs and outcome expectations conducive to academic achievement in undergraduate business education. Theoretical foundations were drawn from psychological contract and social cognitive theories. Results indicated that several sources of expectations exist: individual or self, faculty, and educational institution. Generalized self-efficacy and faculty expectations influence students' academic self-efficacy while institutional climate only affects outcome expectations beliefs. Academic self-efficacy is a stronger predictor of academic achievement than outcomes expectations alone. Psychological contracts must nurture student's self-efficacy, explicit faculty expectations as motivational drivers, and align institutional climates to build students' trust. I discuss the implications of these results for educational models, academic performance, and student retention in business schools.

INTRODUCTION

The design of educational models conducive to students' academic achievement and performance in business undergraduate education is challenging. Business schools and faculty are concerned about mechanisms and processes to improve students' learning and motivation (Bennett, 2003; Page and Mukherjee, 2000). At times, students are blamed for not responding diligently to learning demands and for not achieving the desired standards of excellence designed in the curriculum and teaching plans. This view is supported by the notion of the "student labor contribution" metaphor which suggests that students should make contributions to enhance their education experience and be accountable as they develop their own goals, engage in the learning process, and become more involved in the classroom dynamics (Halbesleben, Jonathon, Becker, Buckley, and Ronald, 2003). Ultimately, the sense of academic integration expressed through students' perceived intellectual development and faculty concerns for teaching and students affects retention (Astin, 1993), particularly in the case of business students (DeShields Jr., Oscar, Kara, and Kaynak, 2005; Schwartz and Washington, 2002).

Several socio-psychological processes may be critical to our understanding of which mechanisms trigger improvement in students' performance. Indeed, self variables have been found to impact academic performance (Reitzes and Mutran, 1980). In the same vein, academic expectations contribute positively to learning (Young, Mark, Klemz, Murphy, and Williamet, 2003) suggesting that when expectations are fulfilled, they constitute relational motivational drivers that lead to changes in behavior and attitude formation in educational settings.

Business students face expectations from three main sources: educational institution, its agents (faculty and staff members), and students themselves. When adequately internalized, these expectations shape students' beliefs (Bennett, 2003), contribute significantly to students' motivations (Saenz, Marcoulders, Junn, and Young, 1999), impact their sense of belonging to the institution (Braxton, Vesper, and Hossler, 1995), determine the amount of students'

involvements (Astin, 1993), and facilitate the development of organizational citizenship behavior with a positive and significant impact on academic performance (Allison, Steven Voss, and Dryer, 2001) and student's satisfaction and retention (Mangum, Baugher, Winch, and Varanelli, 2005). Regrettably, little is known about the impact of students' self-efficacies, faculty expectations, and academic climate on students' academic beliefs and expectations, principally in undergraduate business education.

To the knowledge of the author, no research study in business education has focused on the impact of students' self-efficacies and expectations on their academic success. This study explores the sources of expectations embedded in the psychological contract with students and their influence on students' academic achievements. Psychological contract (Rousseau and Parks, 1993) and social cognitive theory (Bandura, 2002; Bandura, 2001; Bandura, 1977) are suggested as framework to this understanding.

Nature of Psychological Contract

A psychological contract refers to the perception of mutual obligations held by a student and the agents representing the educational institution and specifies the set of expectations of what to give and receive that both parties have from each other in the relationship (adapted from Sims, 1994; Herriot, Manning, and Kind, 1997; and Kotter, 1973). These beliefs and perceptions need not to agree between students and the institution's agents as in the case of employees and employers (Robinson and Rousseau, 1994). Psychological contracts bind students to the educational institution and when unfulfilled or violated increase the students' intentions to quit school, reduce their commitment to continue academic training, and creates other disaffections.

These contracts contain transactional and relational aspects (Rousseau, 1990; MacNeil, 1985). Transactional elements involve students' obligations to work hard, put a lot of energy in their studies, attend classes, and show respectful behavior and academic integrity. These elements are defined by a close-ended time frame, suggest limited involvement, and are acknowledged through grades and recognition for students'

dedication, study, and hard work.

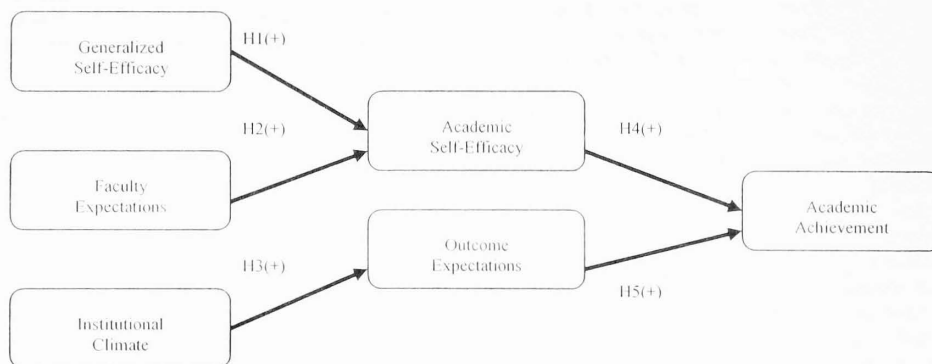
Relational elements assess reliability in the institution's offering and education delivered, students' perceptions of institution's honesty and truthfulness, institution's commitment to students' education, and students' integrity and trustworthiness in return for competitive guidance from faculty and staff and opportunities to participate, achieve, and develop a sense of belonging. The lack of relational elements such as trust in the institution reduces perceived quality and increase student turnover (Ghosh, Whipple, Bryan, and Glenn, 2001). Overall, relational content includes elements pertaining to personal, socio emotional, and value-based considerations (Guzzo, Noonan, and Elron, 1994), has an open-ended time frame, suggests deep involvement, and is a strong mediator between individual experiences and satisfaction and the desire to remain in the institution (Cavanaugh and Noe, 1999).

Good contracts give students the feeling that they have the ability to influence their own destiny while pursuing their education. This predictability allows motivation to act upon and is conducive to outcome expectations and academic

achievement. Previous research has shown that psychological contracts influence individual's desire to trust and cooperate (Coyle-Shapiro, 2002). Being highly subjective, these contracts are defined by the individual and are to be understood from this perspective (Rousseau, 1990; Rousseau, 1989). Then, it is appropriate to examine the concept of psychological contract from the student's standpoint.

Traditionally, psychological contracts are defined in terms of expectations and beliefs and are far more relational than transactional (Guzzo, Noonan, and Elron, 1994). This study focuses on dimensions that influence both the transactional and relational nature of the relationship between the institution (college of business) and its agents (faculty and staff) and students. Generalized self-efficacy, faculty expectations, and institutional climate are hypothesized to influence students' beliefs about their academic self-efficacies and the academic expectations posted on them. Further analysis tests a structural model that shows the impact of these beliefs on students' academic achievement and performance. The complete theoretical model is shown in figure 1.

Figure 1: Hypothesized Structural Theoretical Model



Generalized Self-Efficacy Beliefs

Self-efficacy is defined as the level of confidence individuals have in their ability to execute successfully courses of actions to achieve specific performance outcomes (Bandura, 1977). It refers to the individual's sense of control of the environment and the belief of being able to master change through adaptive behavior when facing novel circumstances. As Bandura (1986) concludes, individuals possess a self system that houses one's cognitive and affective structures that includes the ability to symbolize, learn, plan, regulate behavior, and engage in self-reflection. A strong sense of personal efficacy is related to high achievement (Bandura, 1977) and low self efficacy is associated with depression, anxiety, helplessness, low self-esteem, and pessimistic thoughts about personal accomplishments (Rimm and Jerusalem, 1988).

Self-efficacy is defined as being associated with a specific task. However, "Generalized self-efficacy" has a broader meaning that includes beliefs about individuals' sense of personal competence to deal effectively with a variety of novel

and demanding situations (Scholz, Gutierrez, Sud, and Schwarzer, 2002), coping general life skills that can be successfully applied to a wide range of future situations (Smith, 1989), and the capability to mobilize motivation, cognitive resources, and follow courses of action needed to have control over events in one's life and deal with its challenges (Judge, Locke, and Durham, 1997). Overall, generalized self-efficacy includes the beliefs individuals have about themselves acting as key resources to exercise control and personal agency (Pajares, 1996; Fuertes, Sedlacek, and Liu, 1994).

Lennings (1994) noted that this sense of personal confidence is affected by different sources such as: (1) enactive mastery experience results from personal accomplishments performing similar tasks or the same task successfully; (2) vicarious experiences that occur when a model person masters difficult situations and by means of social comparison individuals adjust their beliefs; (3) symbolic experience through verbal persuasion which occurs for example when a professor conveys a message to students that they will pass a test because of competency; and (4) emotional arousal as when

a person experiences anxiety and stress facing an unknown situation.

Specifically, self-efficacy develops through mechanisms that facilitate social comparison and role modeling as in the case of honors classes. Instructors may build high self-efficacy by showing learners the link between new work and recent successes so they can attribute success to controllable factors such as effort, persistence, and the use of the appropriate learning or cognitive strategy (Margous and McCabe, 2004) as it helps students create their own personal goals.

Academic Self-Efficacy

Academic self-efficacy refers to students' attitudes and feelings about their abilities to perform successfully intellectual or academic tasks at designated levels (Schunk, 1991). Students who believe they are capable of performing academic tasks use more cognitive and meta-cognitive strategies as they persist longer than those who do not (Pintrich and De Groot, 1990). For that reason, academic self-efficacy has been referred as self-efficacy for learning (Zimmerman, Bandura, and Martinez-Pons, 1992; Schunk, 1989).

In essence, generalized self-efficacy beliefs constitute a motivational mechanism that allows for a wide variety of adaptive academic outcomes. Students that possess a general sense of assurance about their capabilities to perform are more likely to work hard, persist even when facing negative feedback and achieve at higher levels when performing academic tasks. Lopez, Brown, Lent, Gore Jr., and Paul (1997) found that self-efficacy partially mediates the effect of ability on course grades. This is because self-efficacy beliefs promote student cognitive engagement and the use of self-regulatory strategies (Linnenbrink and Pintrich, 2002). Thus, formally stated:

Hypothesis 1: Generalized self-efficacy beliefs have a direct positive effect on academic self-efficacy in business students.

Faculty Expectations

Relationships between faculty and students are fostered in and outside the classroom. These relationships are built on expectations both faculty and students have from each other; which translates into specific behaviors. For example, Brooks and Woolfolk (1987) described the ideal student role as cooperating in class activities, following rules, and completing work. Williams and Winkworth (1974) suggested that asking questions during class, participating in class discussions, completing assignments on time, and offering ideas related to topics instructors discuss in class are sign of positive student behavior. Sometimes, faculty expectations are as precise as indicating the allowed number of class meetings students can miss and still expect to earn a specific grade, number of hours per week a student should study, and number of days students should start studying in advance for an exam (Lamers, Kiesler, Curren, Cours, and Connett, 2005).

Faculty expectations reflect specific demands concerning achievement orientation and students' commitments. These high expectations significantly influenced faculty behavior as

they interact with students (Rosenthal and Jacobson, 1968) and the accommodation of this behavior may influence student's performance as suggested by Rubovits and Maehr (1971). As these expectations are communicated to students, they themselves develop their own expectations for academic and intellectual development; which when fulfilled build academic and social integration into the college experience (Braxton, Vesper, and Hossler, 1995). More importantly, high expectations and standards for all students' performances in classes may increase students' motivations to excel (Rowser, 1994). When students are committed, they work hard for good grades, complete their assignments, and put a lot of energy into what they do (Brand and Felner, 1996).

Sound faculty-student relationships contribute significantly to student motivation (Saenz, Marcoullers, Junn, and Young, 1999). Overall, faculty expectations such as succeeding in school and graduating and maintaining high levels of academic integrity and ethical behavior will influence students' academic wellbeing. This discussion leads to the following hypothesis:

Hypothesis 2: Faculty expectations have a direct positive effect on academic self-efficacy in business students.

Institutional Climate

The social environment of educational settings is a promoter or inhibitor of students' academic performance. Social adjustment to college, a sense of fitting in, and feelings of attachment are determinants of students' success and academic performance (Schwartz and Washington, 1976). Positive school climates are associated with students' academic adaptation and achievement (Lizzio, Wilson, and Simons, 2002; Ramsden, 1991), as well as, socio-emotional and behavioral adjustment (Brand and Felner, 1996), and the development of a sense of belonging (Smith and Fouad, 1999).

Overall, school climate impacts the relationship between students and the educational institution by creating affective bonds and contributing to students' motivations (Bennett, 2003). When these relationships grow, a sense of school membership is being delineated; one that builds attachment between faculty and students, commitment to the institution, involvement, and belief (Song and Hattie, 1984). These relationships when nurtured through high levels of understanding, collaboration, and trust facilitate educational exchange and communication. More importantly, trust itself promotes a climate of openness, collegiality, professionalism, and authenticity (Tschannen-Moran and Hoy, 1998) and thus favors positive and effective learning environments (Schwartz and Washington, 2002).

Outcome Expectations

Outcome expectations are beliefs that particular courses of action lead to particular outcomes (Bandura, 1977). Consistent with this view, expectancy value theory sustains that behavior is a function of the likelihood that one's actions will lead to specific outcomes (instrumentality) and the extent that individuals value those outcomes (perceived attractiveness)

(Hoyle and Panter, 1995). Thereby, motivating students to perform academically is dependent on the value they attribute to academic outcomes or goals associated to them, as well as, the belief that exerting effort will lead to higher performance or achieving those goals. Beliefs alone do not relate directly to academic achievement (Booker, 2004).

Recent research that integrates expectancy theory and self-regulatory models suggests that individual valence decisions are more motivational than driven by instrumentality or expectancy of achievement alone (Rheinberg, Vollmeyer, and Rollett, 2000). Being so, Geiger and Cooper (1995) found that the valence variable from the expectancy theory model was the best overall predictor of actual academic performance. Accordingly, internal rewards for goal attainment influence effort and achievement more than external rewards such as grades (Bandura, 1977). Thereby, students that show concerns about how important for them are the consequences of their actions in college will most likely engage in academic endeavors.

Institutional climate affects the nature and consequences of the academic expectations and demands on students. Lizzio, Wilson, Simons, and Rolandet (2002) found that students' perceptions of university learning environments clearly contribute to academic outcomes above the prior academic success of a student. Thereby, meaningful students' learning outcomes are the result of satisfaction with the instructional climate and overall instructional quality (Graham and Gisi, 2000), college credibility (Ghosh, Whipple, Bryan, and Glenn, 2001), and a sense of school membership (Wehlage, Rutter, Smith, Lesko, and Fernandez, 1989). This discussion suggests the following hypothesis:

Hypothesis 3: Institutional climate has a direct positive effect on outcome expectations in business students.

Academic Achievement

Students are expected to develop the capacity to think, learn, and behave autonomously (Wehlage, Rutter, Smith, Lesko and Fernandez, 1989). There is also the urgency to develop generic skills or competencies that help students apply content material to the solution of real problems. These skills include problem solving, analytical skills, ability to work as a team member, solving unfamiliar problems, and ability to plan work (Kreiner and Ashforth, 2004). Rheinberg, Vollmeyer, and Rollett (2000) studied business graduates in the workplace and found that oral communication, interpersonal, supervision, leadership, motivation, teamwork, negotiation, initiative, and enthusiasm were skills determinant for their career development.

In predicting student's academic achievement, academic self-efficacy may be one of the most important non-cognitive variables (Schwartz and Washington, 2002). Specifically, the relationship between self-efficacy and academic performance has been suggested in several studies (Pajares, 2001; Geiger and Cooper, 1995). For example, Young, Klemz, and Murphy (2003) showed that self-efficacy beliefs account for

approximately 14% of the variance in students' academic performance and 12% of the variance in their academic persistence. Reitzes and Mutran (1980) found direct effects of self-variables on academic performance and educational expectations. Their findings suggest that individuals use self-concepts to interpret behavior and these concepts serve as motivational forces towards developing academic plans consistent with their self-images. In an academic setting, this discussion suggests the following hypothesis:

Hypothesis 4: Academic self-efficacy has a direct positive effect on academic achievement in business students.

Similarly, students that have strong beliefs that they will accomplish a particular goal, will be more likely to succeed in that endeavor (Molm, 1994) suggesting that outcome expectations on students are a significant predictor of their academic performance. Together, academic self-efficacy (ability to successfully perform intellectual or academic tasks) and outcome expectations (value attribute to academic outcomes) predict subject matter interest, thus improving course grades (Lopez, Brown, Lent, and Gore Jr., 1997). This discussion suggests the following hypothesis:

Hypothesis 5: Outcome expectations have a direct positive effect on academic achievement in business students.

RESEARCH DESIGN

Procedures

I designed a questionnaire to assess beliefs, perceptions, and feelings about the educational experience of business students. This study makes use of several constructs well defined and previously used in the educational and social behavior literature. I adapted some items based on a thorough review of this literature and findings of previous studies. The questionnaire consisted of six parts that assessed the following constructs: generalized self-efficacy, faculty expectations, institutional climate, academic self-efficacy, outcome expectations, and academic achievement. The unit of analysis is junior and senior students accepted to the College of Business. The design follows the administration of a survey methodology. Instructors contacted students during class period, requested their participation, and handed them a cover letter, questionnaire, and consent form.

Sample

Data was collected from 131 full-time undergraduate business junior and senior students in the College of Business at a state-funded university in the Eastern region of the United States. This sample represents approximately 65% of the total school's junior and senior student population. Only students with junior or senior academic standing were included in the sample because they have already experienced the institutional and educational climate and were considered knowledgeable

about faculty and college's expectations, as well as, the college's educational climate. The sample was 46% male and 54% female, 47% juniors and 53% seniors, with individual GPAs ranged from 1.7 to 3.9, and 94% of the respondents were 20 to 24 years old. Respondents were majoring in accounting, finance, management information systems, economics, marketing, hospitality management or human resources.

Operational Measure of Constructs

I adopted Scholz, Gutierrez Dona, Sud, and Schwarzer's (2002) definition of generalized self-efficacy as the beliefs about individuals' sense of personal competence to deal effectively with a variety of novel and demanding situations. I assessed generalized self-efficacy through a three-item seven-point Likert scale taken from the General Perceived Self-Efficacy scale developed by Scholz, Gutierrez Dona, Sud, and Schwarzer (2002).

Faculty expectations assessed students' perceptions about the expectations that professors have for them and their education in the College of Business. I assessed faculty expectations through a three-item seven-point Likert scale specifically created for this study. These items evaluated the expectations that professors have about students succeeding and graduating from school, as well as, the expectations of high levels of academic integrity and ethical behavior.

Institutional climate measured the degree to which students rely and have confidence in the College of Business in helping them achieve their educational plans. Item 1 (credible) was

selected from the trusting scale developed by Ghosh, Whipple, and Bryan (2001). Items 2 (honest) and 3 (integrity) were selected from trust in organization scale developed by Gabarro and Athos (1976).

Academic self-efficacy assessed students' beliefs about their abilities and feelings regarding their education and academics in the College of Business. I measured this construct through a three-item seven-point Likert scale. Items 1 (satisfied) and 2 (sure) were designed by the author and item 3 (good) was taken from the Academic Self-Concept scale developed by Song and Hattie (1984).

Outcome expectations entailed students' perceptions of possible consequences of their actions in relationship with their education in the College of Business. I assessed outcome expectations through a three item seven-point Likert scale taken from the outcome expectations scale developed by Smith and Fouad (1999).

Academic achievement measured students' perceptions about skills and abilities developed during the completion of their education in the College of Business. I assessed academic achievement through a three item seven-point Likert scale taken from the Generic Skills scale in the CEQ instrument Course Experience Questionnaire by Ramsden (1991).

Statistical Treatment and Analysis

The correlation moment-matrix, means, and standard deviations for all indicators used to assess the structural and measurement models are reported in table 1.

Table 1: Descriptive Statistics and Correlation Moment Matrix for All Variables (N = 131)

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Confident	5.75	0.89	1.00																	
2. Resourceful	5.59	1.04	0.66	1.00																
3. Effort	6.18	0.84	0.47	0.55	1.00															
4. Credible	5.55	1.08	0.18	0.19	0.33	1.00														
5. Honest	5.12	1.34	0.11	0.16	0.17	0.46	1.00													
6. Integrity	5.57	1.10	-0.00	0.07	0.13	0.55	0.53	1.00												
7. Succeed	5.99	1.00	0.12	0.08	0.15	0.26	0.29	0.34	1.00											
8. Graduate	6.02	1.06	0.12	0.11	0.17	0.34	0.26	0.27	0.77	1.00										
9. Ethical	6.03	0.92	0.16	0.17	0.22	0.31	0.26	0.34	0.75	0.73	1.00									
10. Satisfied	5.53	1.17	0.21	0.19	0.35	0.17	0.16	0.24	0.16	0.11	0.21	1.00								
11. Sure	5.77	1.02	0.26	0.27	0.39	0.21	0.20	0.24	0.23	0.30	0.32	0.62	1.00							
12. Good	5.76	1.07	0.18	0.23	0.38	0.24	0.21	0.31	0.26	0.24	0.26	0.68	0.59	1.00						
13. Life	5.56	1.15	0.22	0.24	0.28	0.31	0.28	0.19	0.23	0.17	0.22	0.19	0.18	0.18	1.00					
14. Work	5.92	0.90	0.18	0.18	0.27	0.29	0.22	0.20	0.14	0.17	0.25	0.20	0.21	0.20	0.61	1.00				
15. Everyday	5.44	1.09	0.17	0.17	0.18	0.25	0.19	0.13	0.05	0.09	0.08	0.12	0.12	0.13	0.80	0.59	1.00			
16. Problem	5.08	1.12	0.10	0.08	0.12	0.22	0.29	0.26	0.24	0.27	0.34	0.27	0.25	0.28	0.22	0.24	0.19	1.00		
17. Teamwork	5.34	1.23	0.11	0.11	0.06	0.14	0.23	0.20	0.29	0.36	0.31	0.29	0.27	0.27	0.16	0.12	0.16	0.47	1.00	
18. Confident	5.26	1.12	0.08	0.05	0.15	0.29	0.29	0.32	0.26	0.26	0.36	0.35	0.27	0.32	0.26	0.23	0.23	0.68	0.69	1.00

Distributional Properties of the Data

I examined the distributional properties of the data using PRELIS 2.30. Since most of the indicators did not pass the test for zero skewness and kurtosis, it seemed mandatory to

normalize the data recomputing raw scores as normal scores using the normalized scores command provided in PRELIS. Table 2 shows the test for univariate normality for all variables. A covariance matrix was calculated from these scores and used as input to the model estimation step.

Table 2: Test of Univariate Normality for All Variables

Variable	Skewness		Kurtosis		Skewness and Kurtosis	
	Z-Score	P-Value	Z-Score	P-Value	Chi-Square	P-Value
Confident	-0.86	0.38	-0.91	0.36	1.57	0.45
Resourceful	-0.83	0.40	-1.12	0.26	1.95	0.37
Effort	-2.05	0.04	-1.10	0.26	5.44	0.06
Credible	-0.90	0.36	-0.74	0.45	1.36	0.50
Honest	-0.73	0.46	-0.56	0.57	0.86	0.64
Integrity	-1.01	0.31	-0.09	0.92	1.04	0.59
Succeed	-1.64	0.10	-0.94	0.34	3.59	0.16
Graduate	-1.97	0.04	-0.88	0.37	4.68	0.09
Ethical	-1.77	0.07	-1.08	0.28	4.31	0.11
Satisfied	-1.07	0.28	-0.80	0.42	1.79	0.40
Sure	-1.30	0.19	-0.75	0.45	2.26	0.32
Good	-1.35	0.17	-1.01	0.31	2.86	0.23
Life	-1.11	0.26	-0.97	0.32	2.19	0.33
Work	-1.36	0.17	-0.71	0.47	2.38	0.30
Everyday	-0.79	0.42	-0.33	0.73	0.74	0.69
Problem	-0.27	0.78	-0.41	0.68	0.24	0.88
Teamwork	-0.83	0.40	-0.59	0.55	1.05	0.59
Confident	-0.74	0.45	-0.14	0.88	0.57	0.75

Confirmatory Factor Analysis

A confirmatory factor analysis using LISREL 8 (Joreskog & Sorbom, 1993) is used on the sample to assess the adequacy of behavioral measures and test for discriminant validity of all constructs used in this study. To evaluate the goodness of the model and estimation were the chi-square test and comparative fit index. The indicators loaded in their respective constructs as theory suggests, and the model fit with a $\chi^2 = 114.43$, with 120 degrees of freedom d.f., $p = .63$, and goodness of fit index GFI

$= .91$ (independent model with $\chi^2 = 1834.79$ and 153 d.f.). The results of the confirmatory analysis are shown in table 3. All lambda completely standardized coefficients are significant at $p < .01$ and item variances explained by each indicator are in the range from .44 to .91. All Cronbach's alpha reliability coefficients are acceptable: generalized self-efficacy (.78), faculty expectations (.90), institutional climate (.74), academic self-efficacy (.82), outcome expectations (.86), and academic achievement (.80). All these coefficients were above .70 the minimum recommended by Nunnally (1978).

Table 3: Results of Confirmatory Factor Analysis for Constructs

Items	Lambda completely standardized	Standard Deviation	T-value	R ² item variance explained
Generalized Self-Efficacy $\alpha = 0.75$				
• I am confident that I could deal efficiently with unexpected events (Confident).	0.68 (0.76)	0.07	9.12	0.58
• Thanks to my resourcefulness, I can handle unforeseen situations (Resourceful).	0.87 (0.84)	0.09	10.16	0.70
• I can solve most problems if I invest the necessary effort (Effort).	0.56 (0.67)	0.07	7.78	0.44
Faculty Expectations $\alpha = 0.90$				
• My professors expect me to succeed in school (Succeed).	0.88 (0.88)	0.07	12.20	0.77
• My professors expect me to graduate from school (Graduate).	0.91 (0.86)	0.08	11.85	0.74
• My professors expect me to maintain high levels of academic integrity and ethical behavior (Ethical).	0.78 (0.85)	0.07	11.67	0.73
Institutional Climate $\alpha = 0.74$				
• I believe the College of Business is a credible organization (Credible).	0.77 (0.71)	0.09	8.19	0.51
• The College of Business is always honest and truthful with me (Honest).	0.91 (0.68)	0.12	7.72	0.46
• I believe the College of Business has high integrity (Integrity).	0.84 (0.76)	0.09	8.87	0.58
Academic Self-Efficacy $\alpha = 0.82$				
• I am satisfied with my academic work in my business courses at The College of Business (Satisfied).	0.96 (0.82)	0.09	10.53	0.68
• I am sure of myself in my business courses at The College of Business (Sure).	0.76 (0.74)	0.08	9.22	0.55
• I feel good about my business course work at The College of Business (Good).	0.87 (0.82)	0.08	10.39	0.66
Outcome Expectations $\alpha = 0.86$				
• If I do well in my business courses, I will do better in life (Life).	1.06 (0.92)	0.08	12.62	0.85
• If I do well in my business courses, then I will be ready for the work world (Work).	0.61 (0.67)	0.07	8.35	0.45
• If I take several business courses, it will help me do well in everyday life (Everyday).	0.94 (0.86)	0.08	11.46	0.74
Academic Achievement $\alpha = 0.80$				
• The courses I have taken in the College of Business developed my problem-solving skills (Problem).	0.79 (0.71)	0.09	8.77	0.50
• The courses I have taken in the College of Business helped me develop my ability to work as a team member (Teamwork).	0.87 (0.71)	0.10	8.86	0.51
• The courses I have taken in the College of Business make me feel confident about tackling unfamiliar problems (Confident).	1.07 (0.95)	0.08	12.97	0.91

Discriminant Validity

To assess discriminant validity, I fixed all correlations among factors to 1.0 (phi coefficients $\phi_{ij} = 1.0$), recalculated the model, and used chi-square measure as model fitting

criteria following Anderson and Gerbing's recommendation (1988). All the resulting models, after fixing $\phi_{ij} = 1.0$, fit poorly as shown in Table 4 suggesting that measures load on their corresponding constructs as designed conceptually in this study and are unique from each other.

Table 4: Assessment of Discriminant Validity

Correlation ϕ	Chi-square χ^2	Degrees of Freedom d.f.	p-value
Institutional Climate, Generalized Self-efficacy	227.21	121	0.000
Faculty Expectations, Generalized Self-efficacy	227.78	121	0.000
Faculty Expectations, Institutional Climate	185.56	121	0.000
Academic Self-efficacy, Generalized Self-efficacy	213.86	121	0.000
Academic Self-efficacy, Institutional Climate	192.93	121	0.000
Academic Self-efficacy, Faculty Expectations	256.54	121	0.000
Outcome Expectations, Generalized Self-efficacy	219.84	121	0.000
Outcomes Expectations, Institutional Climate	196.55	121	0.000
Outcome Expectations, Faculty Expectations	276.10	121	0.000
Outcome Expectations, Academic Self-efficacy	267.19	121	0.000
Academic Achievement, Generalized Self-efficacy	232.12	121	0.000
Academic Achievement, Institutional Climate	191.41	121	0.000
Academic Achievement, Faculty Expectations	235.51	121	0.000
Academic Achievement, Academic Self-Efficacy	251.55	121	0.000
Academic Achievement, Outcome Expectations	270.48	121	0.000

Table 5: Standardized Parameter Estimates and Item Variance for the Measurement Model

Item	Generalized Self-Efficacy	Faculty Expectations	Institutional Climate	Academic Self-Efficacy	Outcome Expectations	Academic Achievement	R ²
Confident	0.77						0.60
Resourceful	0.83						0.68
Effort	0.66						0.43
Succeed		0.88					0.77
Graduate		0.88					0.78
Ethical		0.83					0.68
Credible			0.81				0.66
Honest			0.67				0.45
Integrity			0.72				0.51
Satisfied				0.83			0.69
Sure				0.77			0.59
Good				0.83			0.69
Life					0.91		0.82
Work					0.70		0.49
Everyday					0.83		0.69
Problem						0.70	0.49
Teamwork						0.72	0.51
Confident						0.97	0.95

RESULTS

Model Estimation

I estimated the hypothesized model using maximum likelihood (ML) and structural relationships and parameter estimates were obtained using LISREL 8 (Joreskog and Sorbom (1993). The overall fit for the hypothesized structural model was χ^2 (127, N=131) = 133.46, $p < .001$, a non-normed fit index NNFI = .99, an incremental fit index IFI = .99, and a comparative fit index, CFI = .99. Fit statistics showed evidenced of a good fit following the agreed-upon critical cutoff value of .90 for normed indexes (Hoyle and Panter,

1995; Bentler and Bonett, 1980) and .95 (Hu and Bentler, 1998). The root mean square error of approximation (RMSEA) and its probability for test of close fit and standardized root mean squared residual (SRMR) were chosen as indicators of error per degree of freedom. RMSEA = .02 and p-value for test (RMSEA < 0.05) = .96 and SRMR = .08. These values for RMSEA and SRMR suggest a good approximate fit since RMSEA should be smaller than .08 (Browne and Cudeck, 1993) and ideally within the acceptable range .0 - .05 (Hu and Bentler, 1998); and RMSEA has a cutoff value close to .08 (Hu and Bentler, 1998). Variance explained for single indicators ranges from .43 to .95 and were deemed acceptable. Table

5 above shows the standardized parameter estimates and items variances explained for the measurement model.

The estimates of standardized and unstandardized path coefficients shown in table 6 indicate support for all of the five hypotheses in this study. Generalized self-efficacy and faculty expectations have a direct effect on academic self-efficacy (.34 and .33 respectively, $p < .001$). Thus, H_1 and H_2 are accepted.

Institutional climate has a direct positive effect on outcome expectations (.44, $p < .001$) leading us to accept H_3 . Both academic self-efficacy and outcome expectations have a direct positive effect on academic achievement (.44 and .21 respectively, $p < .001$). Thus, H_4 and H_5 are accepted. Figure 2 shows path estimates and standard deviations for the complete model estimation.

Table 6: Standardized, Unstandardized Path Estimates and Hypotheses Testing

Path	Standard Coefficient	Estimate	t-value	Hypothesized Direction	Result
Generalized Self-Efficacy → Academic Self-Efficacy	0.34	0.33 ^a	3.43	+	+
Faculty Expectations → Academic Self-Efficacy	0.33	0.32 ^a	3.48	+	+
Institutional Climate → Outcome Expectations	0.44	0.46 ^a	4.39	+	+
Academic Self-Efficacy → Academic Achievement	0.44	0.36 ^a	4.33	+	+
Outcome Expectations → Academic Achievement	0.21	0.16 ^a	2.38	+	+

Overall fit indices:

$\chi^2 = 133.46$ df = 127 $p = 0.330$

Non-normed fit index NNFI: 0.99

Comparative fit index CFI: 0.99

Incremental fit index IFI: 0.99

Relative fit index RFI: 0.92

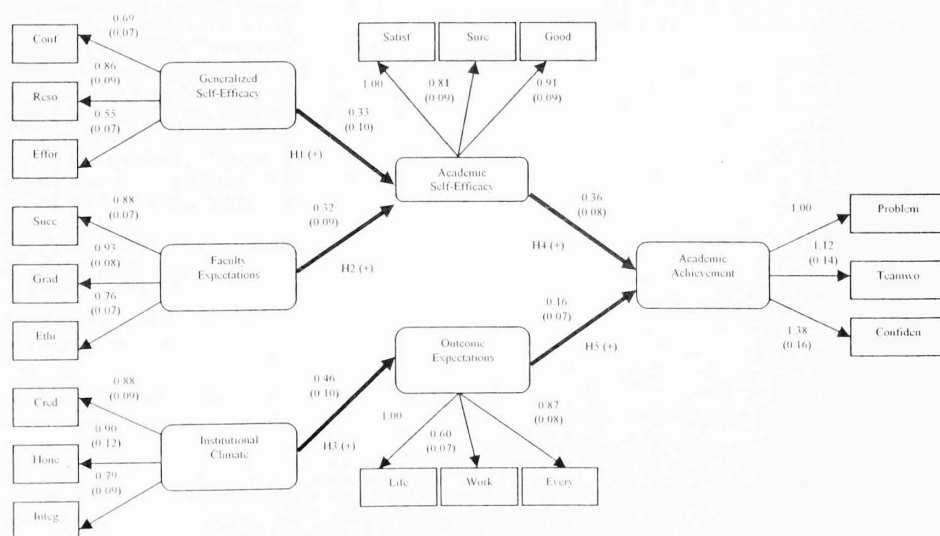
Goodness of Fit Index GFI: 0.90

RMSEA: 0.02

Standardized RMR 0.08

^a Critical value $\alpha = .05 = 1.645$, $p < 0.01$, one-tailed test

Figure 2: Final Model Estimation



Discussion

The design of educational models and academic success is challenging in higher education. Understanding students' self-
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confidences, expectations, and motivations is paramount for the design of effective education goals, curriculum, and learning experiences since they constitute beliefs brought into the relationships between students and their educational institution.

Psychological contracts are intrinsic to these relationships and when breached or conflicts appear; disidentification and ambivalent identification surface (Kreiner and Ashforth, 2004). Erosion in the relationship inhibits academic motivation with the subsequent lack of academic involvement and its impact on student retention. This study moves the research stream forward by explicitly incorporating two salient motivational dimensions: academic self-efficacy and outcome expectations as mediators between self, faculty, and institutional academic expectations on business students and their academic performance.

Several conclusions are drawn from this study. First, this study provides evidence of the existence of several sources of expectations: individual or self, faculty, and educational institution, which influence the levels of students' academic self-efficacies and their perceptions of outcome expectations. These findings suggest that for a psychological contract to be efficient, it should build upon initial student self-efficacy beliefs brought to the relationship and nurtured during its growth. These beliefs are an indication of the extent to which students' cognitive and affective structures are developed and constitute the students' contribution to enhance their educational experience (Halbesleben, Becker, and Buckley, 2003). It is clear that student perceptions of faculty expectations set educational and academic goals for students and reinforce the importance of succeeding in school, graduating, and maintaining integrity and ethical behavior. They set direction for students' intellectual and social growth and themselves become motivational drivers. These conclusions are consistent with previous research (Saenz, Marcouliders, Junn, and Young, 1999; Rowser, 1994; Tinto, 1993) and set the basis of a recent call for a redefinition of the faculty-student exchange through formative assessment (Yorke, 2001).

Second, generalized self-efficacy and faculty expectations equally influence students' level of academic self-efficacy. Students' attitudes and feelings about their abilities to perform academic tasks are influenced by the level of confidence in their abilities to engage in cognitive effort and self-reflection and mobilize motivation to follow courses of action i.e. learning strategies that supports academic achievement. It is probable that setting high academic goals and standards will build students' academic self-efficacies. As such, faculty becomes instrumental in this process by maintaining focus on strategic educational goals, which partially validate students' academic efforts. These findings concur with those of Good and Nichols (2001) concerning inadequate introduction of faculty expectations to students and its negative impact on retention, Lopez et al. (1997) regarding assurance of students' capabilities, and Linnenbrink and Pintrich (2002) facilitation of student's cognitive engagement.

Third, in order for students to credit true consequences of their education and value the outcome of positive academic behavior, they must trust the educational environment i.e. college of business and the values it stands for. Perceived institutional image and character that builds credibility affects students' valence decisions about their academic beliefs and their consequences. Therefore, psychological contracts should embed mechanisms that promote institutional trust, reinforce

institutional identification, and communicates institutional character to business students. Institutional climates in business schools legitimize academic expectations to students through the values that support their identities. Business schools identities have to be credible, trustable, and honest for academic expectations to have an impact on students' performances. Overall, this study extends Mangum, Baugher, Winch, and Varanelli, (2005) basic notion that institutional expectations on students should be realistic and when fulfilled may be key to satisfaction, and low turnover and dropout. Moreover, these findings replicate previous suggestions that collegiate experience and institutional context impact students' achievement orientations (Berger and Milem, 2000). Particularly, the present study defines the context as the student immediate one at the micro level, i.e. college of business rather than at the macro level, i.e. university climate making the findings directly relevant to colleges of business.

Moreover, it may be appropriate to suggest that colleges of business may incorporate measures of students' beliefs into their admission process as to select candidates that believe that faculty has high expectations of them and that the institution devotes efforts to assure a positive learning and nurturing academic climate.

Fourth, academic self-efficacy and outcomes expectations determine business students' academic achievements. Academic self-efficacy and outcome expectations are mediators of the impact of expectations on academic performance. Specifically, they drive the development of analytical skills, team building skills, and confidence to tackle unfamiliar problems. These findings are in line with previous research by Pajares (2001) who suggested the link between motivation and academic achievement, through adaptive mental functioning and well-being; and Gellatly (1996) who concluded that the relationship between conscientiousness and task performance is mediated by performance expectancy and goal choice. Interestingly, academic self-efficacy proves to be more important than outcome expectations when performing academically. Apparently, business students focus their efforts mainly towards the instrumental trait. Thus, believing they are capable of performing academic tasks triggers the use of more cognitive strategies towards their learning and achievement. This finding is in contraposition to previous research that suggests that individual valence decisions are more motivational than instrumental (Rheinberg, Vollmeyer, and Rollett, 2000; Geiger and Cooper, 1995).

Overall, this study suggests that a clear statement about expectations on students is conducive to academic achievement through the fostering of strong students' academic beliefs and perceived outcomes. Both transactional and relational elements embedded in psychological contracts must facilitate the development of motivational drivers (academic self-efficacy and outcome expectations) thus being conducive to academic performance. This finding strongly questions the direct impact of academic environment on students' performances (Karemera, Reuben, and Sillah, 2003) by suggesting the need of outcome expectations as mediator.

Good contracts provide students the confidence to approach intellectual and academic tasks through the assurance about

learners' capabilities to perform, clearly stated demands concerning achievement orientation and commitment, and nurturing feelings that students are able to influence academic outcomes. Clearly, these motivational components: academic self-efficacy and outcomes expectations are important relevant mediators between expectations and students' performance in business education.

Limitations and Future Research

Several limitations apply to this study. All constructs were assessed through students' perceptions. The study did not include independent measures of faculty perceptions about their academic expectations on students and independent measures on institutional climate. Future studies should incorporate assessments of faculty and institutional administrators, thus minimizing common method bias. The model was tested using cross sectional data collected in one institution. As such, the findings do not support the notion that changes in faculty expectations or institutional climates will promote necessarily the enhancement of students' academic self-efficacy and outcome expectations. The attempt to assess change will require the design of longitudinal studies. Finally, data was collected in one institution thus limiting the generalizability of the conclusions.

Although this study produces several interesting results affecting the design of psychological contracts and embedded motivational components, it invites investigation of other psychosocial processes in business students. A natural extension would be to study how learning mechanisms and processes influence performance in business students. Academic self-efficacy and outcome expectations may affect achievement depending on the learning approaches: deep, strategic, or surface selected when approaching the learning task.

Commitment to self-development is another promising research avenue, as schools of businesses and management attempt to promote and foster self-learning, intrinsic motivation, self-reliance, and the ability to accomplish among business students. Finally, studying the content of motivational drivers in relationship to these diverse set of skills and their particular nature will probably be a productive area for research. It has been suggested that these skills are different depending if social, emotional, or analytical intelligences are used. This line of research will ultimately lead to a better understanding of the relationships between business students and their educational institutions. In essence, this improved understanding will assist business instructors and their institutions in building solid models of the educational process.

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