A Postulated Integrative Model of the Determinants of Accounting Students' Academic Performance

Jean Baptiste Koffi Dodor,
Southern University and A&M

ABSTRACT

This study aims at forging a stronger theoretical understanding of accounting Students' Academic Performance (SAP) by proposing some potential determinants using a triangulation theory approach. Much of prior studies on SAP used lonely theoretical perspectives. However, any single theoretical perspective can only offer a partial account of the reality because it is difficult to capture effectively the reality of SAP by focusing on lonely variables. Thereby, in contrast to prior studies, the current study proposes to draw on multiple theoretical perspectives to first identify pertinent determinants of SAP and second to postulate an Integrative Model of Students' Academic Performance (IMOSAP) to be tested through seven regression equations. Model 1 would control for the effects of demographic variables. Model 2 would add program characteristics. Subsequently, some extrinsic factors should be accounted for (Model 3), followed by some intrinsic factors (Model 4), then by behavioral readiness to study accounting (Model 5), behavioral intention to succeed in accounting (Model 6), and finally by some attribution variables (Model 7). Overall, by focusing on some determinants of accounting SAP, such a study would have important implications for accounting students, educators, and other stakeholders.

Keywords: Accounting students; Academic Performance; Intrinsic Factors, Extrinsic Factors; Program characteristics

INTRODUCTION

More than three decades ago, Zeff (1989) observed that accounting programs were in decline and had been for a number of years. That observation has been corroborated more than a decade later by Albrecht and Sack (2000) and Marriott and Marriott (2003). Albrecht and Sack (2000) published a critical report on the demise of undergraduate accounting programs. Three years later, Marriott and Marriott (2003) confirmed that "in the USA, accounting majors have been falling dramatically with repercussions for the accounting profession." While there may be several possible explanations for that trend, it will not be useless to focus on accounting *students' academic performance*" (SAP). In fact, accounting researchers have developed significant interests in the determinants of SAP for a long time on the premise that current SAP problems among accounting students will result in future shortage of accountants in the labor market.

Secondly, "student achievement is an important learning outcome" (Hancock, 2001, 284) because in the current teaching assessment culture of colleges and universities, there is a tremendous interest in the analysis of student performance as a measure of teaching effectiveness. In fact, according to Garner and Dombrowski (1997, 299), "Both quantity and quality of the supply of new accounting graduates are of current concern to the accounting profession." Quantity of the supply has to do with the number of accounting graduates while quality can be defined in terms not only of the education process but also of the desired output, as can be evaluated through the qualifications of accounting graduates (Belford, 1986; Perspectives on Education, 1989). Further, in the early 1990s, AICPA had commissioned a market survey to identify specifically: (1) what factors are most important to students in selecting an academic major; (2) the perceived positive and negative characteristics of accounting as a major and a profession, and (3) effective marketing approaches to ensure the supply of the "best and brightest" accounting graduates.

Third, the Federation of Schools of Accountancy (FSA), in a response to academic and professional reports of decreasing accounting students' quality, organized a database committee back in 1989 to conduct a continuing study of accounting students' quality. Also, the Student Quality Task Force of the Accounting Education Change Commission (AECC) and the Administrators of Accounting Programs Group of the American Accounting Association (AAA, 1992; Williams, 1991) took seriously the issue of quality of the supply of accounting graduates. While these issues might have been raised a long time ago, we do believe that they are still relevant even today and merit further research efforts.

The purpose of this study is therefore to contribute to further understanding of the cumulative knowledge about the critical factors to consider when trying to improve accounting students' academic performance. It can also help accounting students themselves to have a better idea of the factors to pay attention to when trying to improve their academic performance. Overall, we believe that the study will contribute to the broader issue of the quantity and the quality of the supply of accounting graduates. Again, our premise is that the issue of the future quantity and quality of the supply of accounting graduates may not be addressed effectively unless there is a better understanding of the determinants of accounting students' academic performance today.

The Research Problem

Prior studies (Doran, Bouillon & Smith, 1991; Christensen, Fogarty and Wallace, 2002) investigated the determinants of accounting students' academic performance. However, they generally used lonely variables such as cognitive ability, aptitude, or demographic characteristics. They rarely used multiple theoretical perspectives; thus, making our knowledge of students' academic performance limited and insufficient. In contrast to prior studies, the current study proposes an integrative model to further our knowledge of SAP by using a triangulation research strategy. A triangulation research approach uses multiple theoretical perspectives simultaneously and synergistically.

Contribution

Studies such as this would have the potential to contribute to both the theory and the practice of accounting education. Theoretically, researchers like Denzin (1978), Jick (1979), and Hoque and Hopper (1997) have argued that a triangulation research strategy can help capture a more comprehensive, holistic and contextual portrayal of social phenomena than any single theoretical perspective used alone. Notwithstanding, much of the extant accounting education literature on SAP has focused on lonely theoretical perspectives. For example, Shaftel and Shaftel (2005) used only the theory of reasoned action to investigate the influence of effective teaching in accounting on students' attitudes, behaviors, and performances. However, the theory of reasoned action (TRA) suffers clear limitations, which forced subsequently one of its co-authors (Ajzen, 1985; 1991) to develop an alternative theory: the theory of planned behavior (TPB). Drawing on both theories would yield more meaningful results.

From a practical point of view, a better understanding of accounting students' academic performance can contribute indirectly to addressing the persisting issue of quantity and quality of the supply of accounting graduates. In trying to tackle this important issue, recent efforts have been directed more to the supply of accounting Ph.Ds. However, increasing the supply of tomorrow's accounting Ph.Ds. will be possible only through increased supply of today's undergraduate accounting students. In other words, unless sufficient effort, including research effort, is spent now on increasing the quantity and quality of undergraduate accounting students' SAP, we may not be able to have the kind of supply of accountants, including accounting Ph.Ds., expected tomorrow.

The remainder of the study is organized as follows. First, we review selected theories (expectancy theory of Vroom, theory of reasoned action of Fishbein and Azjen, theory of planned behavior of Ajzen, attribution theory of Weiner and the technology acceptance model of Davis) to propose an integrative model of SAP. Next, we develop some research propositions. Finally, we conclude and provide directions for future studies.

THEORETICAL FRAMEWORK & PROPOSITIONS

Theoretical Framework

Consistent with the triangulation approach, the current study draws on the expectancy theory (Vroom, 1964), the Theory of Reasoned Action (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980), the Theory of Planned Behavior (Ajzen, 1985, 1991), the technology acceptance

model (Davis, 1989), as well as the attribution theory (Weiner, 1985, 1995) to come up with an Integrative Model of Students' Academic Performance, as below (IMOSAP, Figure 1, Appendix).

Study's Propositions

As indicated earlier, this study uses a triangulation research strategy to build a holistic model of the determinants of students' academic performance. In this perspective, a thorough review of the literature has revealed the above relevant theories, from which we draw important variables.

Linking Motivation to SAP

Prior research has largely supported a positive relationship between motivation and SAP in a number of contexts (Klein et al., 2006; Simmering et al., 2009). Garrison (1997) in particular proposes that motivation is one of three overlapping dimensions of self-directed learning success. Motivation can be defined as the state of mind that stimulates an individual to act or to perform. Still, the literature generally distinguishes two facets of motivation: (1) intrinsic motivation and (2) extrinsic motivation. Intrinsic motivation is mastery oriented, "characterized by the use of effective task strategies, a belief in one's ability to improve, a preference for challenging tasks, and feelings of satisfaction when effort is applied to difficult tasks and when effort leads to personal success" (Ames, 1992). In other words, a person is intrinsically motivated to perform when that person is motivated from within. Dev (1997) argues that an intrinsically motivated student will not need any type of reward or incentive to instigate a learning task. Further, Lepper (1998) views intrinsic motivation for own sake and for personal enjoyment it provides, the learning it permits, or the feeling of achievement it gives. Intrinsically motivated students tend to use learning strategies that require more effort and that allow them to process information more effectively. Condry and Chambers (1978) found that, when faced with multifarious intellectual tasks, intrinsically motivated students use more logical information gathering and decision-making strategies than do extrinsically motivated students.

In contrast, and consistent with the Theory X of McGregor (1960), extrinsically motivated students are more prone to minimal effort. In particular, Dev (1997) suggests that extrinsically motivated students engage in learning purely for attaining a reward or for avoiding some punishment. Lepper (1998) expresses that same view. According to Afzal et al. (2010, 81), to motivate students extrinsically, students should be publicly recognized for their academic achievements, which may be accomplished through giving bonus points, stickers, candy, or other rewards or incentives. Brophy (1986) considers motivation to learn as an ability acquired through general experience but strengthened most directly through communication of expectations and direct instruction or socialization by others (e. g. parents, teachers, friends).

Marshall (1987) views students' motivation as a beneficial force to learners while for Ames (1990), motivation to learn is dependent on long-term, quality attachment in learning and pledge to the process of learning. Finally, Lumsden (1994) analyzes students' involvement towards education and sources of their motivation. Based on this discussion, we expect that an accounting student's motivation to study will predict her/his academic performance.

Proposition P1a: Accounting students' motivations toward studying accounting will predict their academic performance.

Linking Attitude to SAP

The relationship between attitude and behavioral outcomes such as students' academic performance (SAP) remains very widely studied in attitude-focused research (Ajzen, 2001). There exists in fact a strong agreement about the predictive relationship between attitude and behavior (Cooper and Croyle, 1984; Ajzen, 1988; Miller et al., 2007). The TRA (Fishbein and Azjen, 1975; Azjen and Fishbein, 1980) suggests that behavior is a function of attitudes and subjective norms, where attitudes are individuals' positive or negative feelings about a behavior and is a function of one's beliefs about the consequences of the behavior and the corresponding evaluation of the desirability of these consequences. The TRA considers that behavioral intentions constitute plans of actions that are obtained through individuals' conscious and deliberate decision.

As a part of a large survey of trends in accounting students' characteristics, Nelson and Vendryzk (1996) measured the general attitudes of students toward the accounting profession in a longitudinal study. Moreover, Cohen and Hanno (1993) and Allen (2004) came to the conclusion that students' decisions to major or not to major in accounting are influenced by their attitudes, while Felton et al. (1994) found a strong relationship between students' attitudes and their intentions to pursue a particular career path in accounting. Prior studies suggested that more positive attitudes are more likely to prompt a positive behavior. For instance, Douglas and Shepherd (2002) indicated that people are more likely to be self-employed if they have more positive attitudes towards risk and independence. Because the literature shows clearly attitude as a good predictor of behavior, we can confidently formulate the following proposition.

Proposition P1b: Accounting students' attitude toward studying accounting will predict their academic performance.

Linking Perceived Behavioral Control to SAP

Perceived Behavioral Control represents the extent to which a person feels able to enact a behavior, depending on how much the person has control over the behavior and how confident s/he feels about being able to perform or not to perform the behavior (Ajzen, 1991). Ajzen (1988, 1991) acknowledges that total volitional control is difficult to apply to most everyday acts and concludes that the TRA is probably too restrictive. As a result, following Ajzen and Madden (1986), Ajzen (1991) introduced a new variable: Perceived Behavioral Control (PBC). Ajzen (1988) has indicated previously that the new variable (PBC) is linked to the concept of perceived self-efficacy (Bandura, 1982), which develops in response to the information acquired from past performances, observational experience, forms of persuasion, and physiological indices. The TPB clearly hypothesizes PBC to directly influence, not only behavioral intention but also actual behavior.

Empirically, the Theory of Planned Behavior has been used to predict such behaviors as weight loss (Schifter and Ajzen, 1985), students' class attendance and getting A in a course (Ajzen and Madden, 1986), voting behavior (Netemeyer and Burton, 1990), attendance at training (Fishbein and Stasson, 1990), and many other behaviors at individual level of analysis. All these prior studies found "perceived behavioral control" to be a significant predictor of actual behavior. Further, Beck and Ajzen (1991) corroborate these findings in their study of dishonest

behaviors: the perceived behavioral control variable does have an incremental contribution. Thus, "perceived behavioral control" is another pertinent variable identified as relevant to predicting students' academic performance leading to the following proposition.

Proposition P1c: Accounting students perceived behavioral control over studying accounting will predict their academic performance.

Linking Subjective Norms to SAP

Both the TRA and the TPB generated a robust research history that support the relationship between subjective norms about behavior and behavioral intention. According to Hsu and Chiu, (2004), subjective norms correspond to "perceived social pressure to perform or not to perform a behavior." In other words, subjective norms represent an individual's perceptions of whether people that are important to her/him think that a particular behavior should be performed. These norms are therefore perceived social pressures on an actor to perform or not to perform a given behavior: the actor's perception that important stakeholders would approve or disapprove the behavior should normally influence the actor's behavioral intention to perform or not to perform the targeted behavior.

Empirically, Bentler and Speckart (1979) found that subjective norms were highly predictive of behavioral intentions. Further, Ajzen (1991, 190) reported correlation coefficients in the range of negative 0.01 to positive 0.70 with a mean of 0.36. The stronger are an actor's beliefs that important stakeholders would approve the performance of a behavior, the more likely and the stronger should be the actor's behavioral intention to perform the behavior. Conversely, the weaker the actor's beliefs that important stakeholders would approve the performance of the behavior, the less likely and the weaker should be the actor's behavioral intention about performing the behavior. Considering these arguments together suggests that the stronger are an accounting student's beliefs about important stakeholders' approval of accounting as a good field of study, the stronger should be the student's behavioral intention to perform well academically in accounting. Consequently, we can formulate the following proposition.

Proposition P2a: Subjective norms about accounting will predict accounting students' academic performance.

Linking Institutional Support to SAP

As Fogarthy and Ruhl (1997, 27) pointe it out, "the attention on institutional antecedents … in other academic disciplines suggests that systematic explanations cannot be found in individual differences." However, institutional antecedents have received only limited attention in the accounting education research, specifically as related to students' academic performance. Empirically however, Baruth and Manning (1991) found that policies and practices of an institution regarding diversity for example could result in differential outcomes for students. Further, Hurtado (1992) and Reid & Radhakrishnan (2003) found program diversity to contribute significantly to perceptions of campus climate. In turn, institutional policies and practices are reflected in program characteristics.

Furthermore, Miller et al. (2007) advance three reasons for studying perceptions of institutional support in understanding behaviors. First, an individual's perceptions of how important others think that the individual should behave influence actual behavior (or

performance). Second, the variable "institutional support" was found as a critical predictor in at least a prior study (Rogers et al., 1998). Third, faculty perceptions of institutional support have been found to be significantly linked to student performance in a large-scale study (Astin, 1993). Therefore, we expect that perceived institutional support should significantly determine students' academic performance; hence we formulate the following proposition:

Proposition P2b: Accounting students' positive perceived institutional support will positively predict their academic performance.

Linking Social Support to SAP

The concept "social support" has also been used extensively in other fields of study. In particular, Cobb (1976, 300) identifies three types of social support: (1) emotional support (which makes the recipient feel that s/he is cared for); (2) esteem support (that makes the recipient feel valued); and (3) network support (in which the recipient feels connected to a social network of mutual obligations). Subsequently, House (1981) broadened the definition to distinguish: (1) emotional support (including esteem, affect, trust, concern, or listening); (2) appraisal support (affirmation, feedback, or social comparison); (3) information support (including advice, suggestion, directives, or information); (4) instrumental support (including aid in kind, money, labor, time, or modifying environment). Whatever its definition is, social support is believed to enhance performance. It is in a similar line of thinking that classical human relations theorists argue that supportive behavior could lead to improved job satisfaction and productivity of subordinates.

Empirically, Sarason (1984) conducted an extensive research (yielding nine technical reports and fourteen articles) that investigated the relationship between social support and performance in complex organizations. The findings show that social support is related to performance, interpersonal skills and relationships in a complex organization. Similarly, Kirmeyer and Lin (1987, 139) investigated social support and its relationship to observed communication with peers and superiors. They observed that researchers have long recognized social support and the closely related concepts of interpersonal warmth, trust, and openness as core dimensions of organizational communication climate…that may affect many organizational outcomes, including job satisfaction and performance. Bliese and Britt (2001, 426) indicate, "*Theoretically, social support is expected to help individuals cope with the negative effects of stressors because positive social environments provide confirmation of social identity, instrumental aid, and various forms of support*." Social support therefore presumably helps individuals effectively cope at least with stressors in their environments, which in turn helps improve performance. Based on the aforementioned literature, social support should significantly determine students' academic performance in accounting; hence we formulate the following proposition:

Proposition P2c: Accounting students perceived positive social support will positively predict their academic performance.

Linking Program's Perceived Usefulness and Perceived Ease to SAP

The technology acceptance model (TAM) of Davis (1986) is the model that contains both "perceived usefulness" and "perceived ease." It is a typical extension and application of the TRA. However, according to Plouffe et al. (2001), TAM is built from not only the theory of reasoned actions but also draws on expectancy theory (Vroom, 1964) and self-efficacy theory (Bandura, 1977). Further, Karahanna and Straub (1999) studied the psychological origins of the TAM and indicate that the model includes such variables as behavioral intention to use an innovation, attitudes toward using innovation, perceived usefulness, and perceived ease of using innovation as well as other variables like system feature and user support. "*Perceived usefulness*" is the extent to which a technological innovation is expected to improve the potential adopter's performance, while "*Perceived ease-of-use*" corresponds to the degree to which the potential adopter expects a technological innovation to be free of effort in use. Although these two variables have traditionally been used for such behaviors like adoption of innovations and technologies, we do believe that they are relevant to our postulated model in that the perceived usefulness and the perceived ease of an accounting program can help a student do better in that program. Hence, we formulate the following two propositions:

Proposition P3a: Accounting students' perceived usefulness of the accounting major will positively predict their academic performance.

Further,

Proposition P3b: Accounting students' perceived ease of the accounting major will positively predict their academic performance.

Potential Moderating Effect of Attribution

Attribution theory (Weiner, 1985, 1995) comes from a tradition within motivational theories that stress individuals' causal explanations and/or justifications for the outcomes of their own behaviors. The nature of these causal explanations varies along the dimensions of locus, stability, and controllability. Locus reflects whether the cause of an outcome is internal versus external. Stability stands for the extent to which the causal attribution will consistently replicate itself in similar situations. Finally, controllability reflects the extent that an individual (a student in this case) will perceive herself/himself as being able to influence the outcome. Weiner (1985) distinguishes causes of behavior that originate within individuals themselves (intrinsic causes) from those that stem from external factors (extrinsic causes). Attributing one's academic performance to more stable, internal, and uncontrollable causes (e.g., innate ability) is detrimental to motivation and performance strivings. This type of attribution is thought to lead to a more hopeless emotional response and lowered expectations for future performance. In contrast, it is generally seen as more beneficial for future motivation and performance to attribute outcome to more unstable but controllable causes (volitional attribution). For instance, if a student attribute poor performance to lack of effort, then because s/he has recognized honestly her/his responsibility for the poor performance, s/he may subsequently strive to do better. In contrast, if the student attributes a poor performance to external non-controllable causes, that student can become hopeless and may not be able to take the necessary steps to improve her/his performance in the future. Because it is conceivable to assume that students can attribute their

performances to some causes, either intrinsic or extrinsic, we can expect attribution to moderate the relationships between SAP and its antecedents; hence, we add the following proposition:

Proposition P4: Accounting students' attribution of success or failure will significantly moderate the relationship between their academic performance and its antecedent variables.

Second Order Propositions

Consistently with Figure 1 in Appendix, we also propose the following second-order relationships: (1) behavioral readiness to major in accounting and (2) behavioral intention to succeed in accounting program.

Proposition P5: Behavioral readiness will significantly predict accounting students' intention to succeed in accounting.

Proposition P6: Behavioral readiness will significantly predict accounting students' academic performance.

Proposition P7: Behavioral intentions to succeed in accounting will significantly predict accounting students' academic performance.

CONCLUSION AND RESEARCH DIRECTION

As a conclusion, in 1991, AICPA had commissioned a market survey to identify specifically: (1) what factors are most important to students in selecting an academic major; (2) the perceived positive and negative characteristics of accounting as a major and a profession, and (3) effective marketing approaches to ensure the supply of the "best and brightest" accounting graduates. More than three decades later, however, empirical studies on factors that determine accounting students' academic performance is still relatively scare. One of the objectives of this study is to contribute to filling that gap by providing some propositions to conduct further research focused on SAP. Thus, future studies should collect empirical data to test the proposed model in this study, discuss the significance of the results, and draw meaningful conclusions for the accounting profession's stakeholders.

REFERENCES

Afzal, H.; I. Ali; M. A. Khan; K. Hamid. 2010. A Study of University Students' Motivation and its Relationship with their Academic Performance. International Journal of Business and Management. Vol. 5 (4): 80-88.

Ajzen, I. (1985). From intentions to actions: a Theory of planned behavior. In J. Kuhl and J. Beckman
Eds), Action control from cognition to behavior (pp. 11-39).

Ajzen, I.; Madden, T.J. (1986). Prediction of goal -directed behavior: Attitudes, Intentions, and Perceived Behavioral Control. Journal of Experimental Social Psychology, Vol. 22: 453-474.

Ajzen, I. 1988. Attitudes, personality, and behavior. Chicago: Dorsey Press.

Ajzen, I. (1991). The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes, Vol. 50(2):179-211.

Ajzen, I. (2001). Nature and operation of attitudes. Annual Review of Psychology, Vol. 52: 27-58.

American Accounting Association (AAA). 1992. Student recruiting by accounting programs. Accounting Education News Special Issue (June): 7-8.

American Institute of Certified Public Accountants (AICPA). 1992. Academic and career development division seeks CPAs for the future. Journal of Accountancy, Vol. 174(4) (October): 117.

Albrecht, W.S. and Sacks, R.J. (2000). Accounting Education: Charting the Course Through a Perilous Future. Sarasota, Florida: American Accounting Association.

Allen, C. L. (2004). Business students' perception of the image of accounting. Managerial Auditing Journal, Vol. 19(2): 235-258.

Ames, C.A. (1990). Motivation: What teachers need to know? Teachers College Record, Vol. 91 (3): 409-421.

Ames, C. A. (1992). Achievement goals and the classroom motivational climate. In Schunk D.H., Meece, J.L., ed. Student Perceptions in the Classroom, Mahwah: Lawrence Erlbaum Associates, Inc.; pp: 134-147.

Astin, A. W. 1993. How are students affected? Change, Vol. 25: 44-50.

Bandura, A. (1977). Self-Efficacy: Toward a Unifying Theory of Behavioral Change. Psychological Review, Vol 8(2): 191-215.

Bandura, A. (1982). Self-efficacy Mechanism in Human Agency. American Psychologist, Vol 3(2): 122-147.

Baruth, L. G., and M. L. Manning. 1991. Multicultural counseling and psychotherapy: a lifespan perspective. New York: Merrill.

Beck, L., & Ajzen, I (1991). Predicting Dishonest Actions using the Theory of Planned Behavior. Journal of Research in Personality, Vol 25(3): 285-301.

Becker, W. E. 1997. Teaching Economics to Undergraduates. Journal of Economics Literature, Vol. 35(September): 1347-1373.

Bedford, N. 1986. Future accounting education: Preparing for the expanding profession. Issues in Accounting Education (Spring): 168-195.

Bentler, P., & Speckart, G. (1979). Model of Attitude – Behavior Relations. Psychological Review, Vol (5): 452-464.

Bliese, Paul D.; Thomas W. Britt. 2001. Social Support, Group Consensus and Stressor – Strain Relationships: Social Context Matters. Journal of Organizational Behavior, Vol. 22: 425-436.

Brophy, J. 1986. On motivating students. Occasional Paper No. 101. East Lansing, Michigan: Institute for Research on Teaching, Michigan State University, 73 pages.

Christensen, T., Fogarty, T., Wallace, W. (2002). The Association Between the Directional Accuracy of Self-Efficacy and Accounting Course Performance. Issues in Accounting Education, Vol. 17: 1-26.

Cobb, S. 1976. Social support as a moderator of life stress. Psychosomatic Medicine, Vol. 38: 300-314.

Cohen, J.R. and Hanno, D. M. (1993). An analysis of underlying constructs affecting the choices of accounting as a major. Issues in Accounting Education, Vol. 8(2): 219-238.

Condry, J. and J. Chambers. 1978. Intrinsic motivation and the process of learning. In the Hidden Costs of the Reward, Edited by M.R. Lepper and D. Greene: 61-84. Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.

Cooper, J.; R. T. Croyle. 1984. Attitudes and attitude change. Annual Review of Psychology, Vol. 35: 395-426.

Davis, F.D. 91986). A Technology Acceptance Model for Empirically Testing New End-user Information Systems: Theory and Results, MA, MIT.

Davis, F. D. 1989. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology, Management Information Systems Quarterly, Vol. 13(3): 319-340.

Denzin, N. K. 1978. The logic of naturalistic inquiry. In Denzin, N. K. (Eds), Sociological Methods: A Sourcebook. New York: McGraw-Hill.

Dev, P.C. 1997. Intrinsic motivation and academic achievement: What does their relationship imply for the classroom teacher? Remedial and Special Education, Vol. 18 (1): 12-19. Education Change Commission.

Doran, B., Bouillon, M., & Smith, C. (1991). Determinants of Student Performance in Accounting Principles I and II. Issues in Accounting Education, Vol. 6: 74-84.

Douglas, E. J. and Sherpherd, D. A. (2002). Self-employment as a career choice: Attitudes, entrepreneurial intentions, and utility maximization. Entrepreneurial Theory and Practice, Vol. 26(3): 81-90.

Felton, S.; Buhr, N. and Northey, M. (1994). Factors influencing the business students' choice of a career in chartered accountancy. Issues in Accounting Education, Vol. 9: 131-141.

Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior; An Introduction to Theory and Research. Reading, MA: Addison-Wesley.

Fishbein, M., & Stasson, M. (1990). The Role of Desires, Self-Predictions, and Perceived Control in the Prediction of training Session Attendance. Journal of Applied Social Psychology, Vol. 20(3): 173-198.

Fogarty, I., & Ruhl, J. (1997). Institutional Antecedents of Accounting Faculty Research Productivity. Issues in Accounting Education, Spring: 28-48.

Fredricks, A. J., and Dossett, D. L. (1983). Attitude-behavior relations: A comparison of the Fishbein-Ajzen and Bentler-Speckart models. Journal of Personality and Social Psychology, Vol. 45: 501-512.

Garner, R. Michael; Robert F. Dombrowski. 1997. Recruiting the "Best and the Brightest": the Role of University Accounting Programs and State CPA Societies. Issues in Accounting Education, Vol. 12(2): 299-314.

Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. Adult Education Quarterly, Vol. 48: 18-33.

Hancock, Dawson R. 2001. Effects of Test Anxiety and Evaluative Threat on Students' Achievement and Motivation. Journal of Educational Research, Vol. 94(5): 284-290.

Hoque, Z.; Hopper, T. 1997. Political and industrial relations turbulence, competition and budgeting in nationalized Jute Mills of Bangladesh. Accounting and Business Research, Vol. 37(2), pp. 125-143.

House, J. S. (1981). Work Stress and Social Support. Reading, MA: Addison-Wesley.

Hsu, M., & Chiu, C. (2004). Predicting Electronic Service Continuance with a Decomposed Theory of Planned Behavior. Behavior and Information Technology, Vol. 23(5): 359-373.

Hurtado, S. 1992. The campus racial climate. Journal of Higher Education, Vol. 63: 539-569.

Jick, T. D. 1979. Mixing qualitative and quantitative methods triangulation in action. Administrative Science Quarterly, Vol. 24: 602-611.

Jackling, B. and Keneley, M. (2009). Influences on the supply of accounting graduates in Australia: A focus on international students. Accounting and Finance, Vol. 49(1): 141-159.

Karahanna, E., Straub, D. (1999). The Psychological Origins of Perceived Usefulness and Ease-of- Use. Information and Management, Vol. 35(4): 237-250.

Kirmeyer, Sandra L.; Thung-Rung Lin. 1987. Social Support: its relationship to observed communication with peers and superiors. Academy of Management Journal, Vol. 30(1): 138-151.

Klein, H. J., Noe, R. A., and Wang, C. (2006). Motivation to learn and course outcomes: The impacts of delivery mode, learning goal orientation, and perceived barriers and enablers. Personnel Psychology, Vol. 59 (3): 665-702.

Lepper, M. R. 1998. Motivational consideration in the study of instruction. Cognition and Instruction, Vol. 5 (4) : 289-309.

Lumsden, L. S. 1994. Student motivation to learn. Educational Resources. Information Center, Digest Number 92.

Marshall, H.H. 1987. Motivational Strategies of Three Fifth-Grade Teachers. The Elementary School Journal, Vol. 88 (2): 135-150.

Marriott, P. and Marriott, N. (2003). Are we turning them on? A longitudinal study of undergraduate accounting students' attitudes towards accounting as a profession. Accounting Education, Vol. 12(2): 113-133.

Miller, K. L.; S. M. Miller, and J. C. Stull. 2007. Predictors of counselor educators' cultural discriminatory behaviors. Journal of Counseling & Development, Vol. 85 (3): 325-336.

McGregor, Douglas .1960. The Human Side of Enterprise, McGraw-Hill, New York.

Nelson, I. T. and Vendryzk, V.P. (1996). Trends in accounting students' characteristics: a longitudinal study at FSA Schools, 1991-1995. Journal of Accounting Education, Vol. 14(4): 453-475.

Netemeyer, R., & Burton, S. (19900. Examining the Relationship Between Voting Behavior, Intention, Perceived Behavioral Control, and Expectation. Journal of Applied Social Psychology, Vol. 20(8): 661-680.

Perspectives on Education: Capabilities for success in the Accounting Profession (The White Paper). 1989. Arthur Anderson & Co., Arthur Young, Coopers & Lybrand, Deloite Haskins & Sells, Ernst & Whiney, Peat Marwick Main & Co., Price Waterhouse, and Touche Ross. New York, NY.

Plouffe, R., Hulland, J., & Vandenbosch, M. (2001). Richness versus Parsimony in Modeling Technology Adoption Decisions: Understanding Merchant Adoption of a Smart Cart Payment System. Information Research, Vol. 12(2): 208-222.

Reid, L., & Radhakrishnan, P. (2003). Race Matters: The Relation Between Race and General Campus Climate. Cultural Diversity and Ethnic Minority Psychology, Vol. 9(3): 263-275.

Sarason, I. G. 1984. Social support and performance in complex organizations. Washington University at Seattle, Department of Psychology; Final Report (06/1980–12/1983).

Schifter, D., & Ajzen, I. (1985). Intention, Perceived Control, and Weigh Loss: An Application of the Theory of Planned Behavior. Journal of Personality and Social Psychology, Vol 49(3): 843-851.

Shaftel, J., and Shaftel, T. (2005). The Influence of Effective Teaching in Accounting on Student Attitudes, Behavior, and Performance. Issues in Accounting Education, Vol. 20(3): 231-246.

Simmering, M. J.; C. Posey; and G. Piccoli (2009). Computer Self-Efficacy and Motivation to Learn in a Self-Directed Online Course. Decision Sciences Journal of Innovative Education, Vol. 7(1): 99-121.

Vroom, V. H. (1964). Work and Motivation. New York: Wiley.

Weiner, B. (1985). An attributional theory of achievement motivation and emotion. Psychological Review, Vol. 92 : 548-573.

Weiner, B. 1995. Judgments of Responsibility: a foundation for a theory of social conduct. New York: Guilford Press.

Williams, D. Z. 1991. Letter to Accounting Program Administrators. Torrance, CA: Accounting.

Zakaria, M.; Fauzi, W. N. and Hasan, S. J. (2012). Accounting as a choice of academic program. Journal of Business Administration Research, Vol. 1(1): 43-52.

Zeff, S.A. (1989). Does accounting belong in the university's curriculum? Issues in Accounting Education, Vol. 4(1): 203-210.

Appendix

FIGURE 1
The Postulated Integrative Model of Students' Academic Performance (IMOSAP)