FACTORS INFLUENCING PERFORMANCE OF ACADEMIC MIDDLE MANAGERS IN THE

TECHNICAL COLLEGE SYSTEM OF GEORGIA

by

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(Under the Direction of Christopher Morphew)

ABSTRACT

The purpose of this mixed-methods study was to determine to what extent AMMs in the Technical College System of Georgia report that CAMEO factors (climate, ability, motivation, environment, and opportunity to perform) influence performance of administrative duties. A total of 95 responses were analyzed from the 150 AMMs identified.

Four research questions guided this study. First, to what extent do climate, ability, motivation, environment, and opportunity to perform (CAMEO Model) affect the performance of academic middle managers as instructional administrators in the Technical College System of Georgia? Second, how does the technical college's regional accreditation experience level (experienced, less experienced, and inexperienced) mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia? Third, how does a teaching requirement for AMMs mediate the relationship between the CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia? Finally, how does the management experience of academic middle managers mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?

Repeated measures ANOVA revealed statistically significant within-subject effects. Ability and motivation (satisfaction) were significantly greater influences than the other CAMEO factors, and environment was significantly less of an influence. MANOVA analyses determined no significant differences between the different groups analyzed. However, qualitative responses to open-ended questions revealed in-depth information about each factor's influence and whether the influences were positive or negative. Positive and negative themes emerged from this data both supporting and sometimes contradicting the quantitative data. As a follow-up analysis, Pearson's *r* correlations were conducted, and several positive correlations were found between pairs of CAMEO factors.

Three conclusions were drawn. First, CAMEO factors are highly related and should be studied as they interact instead of how they separately influence AMMs. Second, environment does not influence AMM performance as much as the researcher had predicted. Third, AMMs in the TCSG do not receive sufficient preparation and ongoing staff development for roles they are expected to fill. The researcher made several policy recommendations to better support AMMs within the TCSG.

INDEX WORDS: Technical College, Two-year College, Dean, Academic Middle Manager

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DOCTOR OF EDUCATION

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DEDICATION

I dedicate this dissertation to my family. First, I dedicate this paper to my wonderful husband Brian. Without his love and support, I could not have completed this degree. Second, I dedicate this paper to my parents, who taught me early the value of an education. My mother has celebrated every victory with me during this process, and I know my father is smiling down from heaven as I finish. I am so thankful that I had the opportunities my parents made available to me to further my education. In my career as a two-year college educator, I can see how truly lucky I have been, and I hope I can be as much of a positive influence on my children's education as my parents were on my education. Next, I dedicate this dissertation to my sister Jaclyn Winskie and my mother-in-law Pat Daniel, who have been two of my strongest cheerleaders over the years. Finally, I dedicate this dissertation to my daughter Elizabeth and my son Ethan, who have had to share me with this research project their entire young lives. Elizabeth, even though it was October, I'm glad we finally got you to Tybee this year.

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CHAPTER 1

INTRODUCTION

According to Knight and Holen (1985), a college's or university's success is directly linked to the success of its academic departments. Academic middle managers (AMMs) directly supervise these academic departments; as a result, the role of an AMM is critical to the success of a college or university. This leads one to question what influences AMMs' job performance on a daily basis. Few studies have addressed this important question, and none have addressed this question within a two-year technical college system. This study will analyze factors that influence AMM's performance within the Technical College System of Georgia (TCSG), a relatively new technical college system that began as a network of area vocational-technical schools and has emerged during the last decade into a competitive two-year technical college system that serves students not only pursuing traditional technical training but also those pursuing an associate degree.

For the purpose of this study, the definition of an AMM is an administrator or faculty member who may have both teaching and administrative responsibilities, including the curricular oversight, evaluation and direct supervision of full-time and adjunct faculty, scheduling of classes, and development and management of a division budget. AMMs within the TCSG fill a largely undefined, although critical role, within the system. At some colleges the AMM functions as Dean of Academic Affairs. At others, the position is called Director of Instruction or Dean of Instructional Services. Still others place a department chair or a department head in this role.

Furthermore, an entire group of administrators who supervise the state's adult literacy efforts is also part of this group of AMMs.

Duties of AMMs throughout the system are ambiguous. Some AMMs are required to teach, while others are not. For those who teach, no standardized formula exists for determining the number of direct student contact hours. Furthermore, the academic divisions that AMMs supervise are decided upon and named at the college level. Additionally, academic divisions are decided upon by program area at the state level, but it is up to individual colleges to decide how they would like to group the program areas together for AMMs to supervise them. For example, at the larger technical colleges, the general studies division, including core classes and learning support classes, may have its own division while at smaller colleges the general studies division may be combined with other smaller program groupings areas such as Early Childhood Care and Education and Cosmetology, which are normally grouped into a single division called Public Services. At more than one small technical college in the system, one General Studies and Public Services division covered all general studies, learning support services, and Public Services programs.

Since the mission of the TCSG is changing so that more focus is placed on academics, many organizational changes are also taking place. From the titles of academic divisions to the length of the academic term, the TCSG is making changes to become more like the University System of Georgia. For example, the current "Academic Affairs" division title was formerly "Instructional Services," and the AMM position "Dean of Academic Affairs" was not so long ago titled "Director of Instructional Services." Over the last couple of years, however, the agency has focused much more heavily on academics. Although an effort is underway to promote uniformity among the colleges, inconsistencies remain, especially with regard to

academic middle management, where "director" and "dean" are both currently used as position titles for the same academic middle management position. As a direct result of the organizational incongruity that exists within the area of academic affairs statewide, only a weakly defined peer group has been established so far for AMMs, which works against effective statewide communication among the AMMs in the system.

AMMs have a unique leadership situation due to the organizational environment of colleges and universities and no parallels can be found anywhere within business and industry in the U.S. (Gmelch, 2004). Furthermore, AMMs have had little training outside of teaching and do not anticipate the leadership role they will need to fill before accepting the position. "Deans today are inevitably confronted with situations that require them to engage in roles that conflict and manage priorities that remain unfocused" (Montez, Wolverton, & Gmelch, 2002, p. 254). Moreover, "Demands from superiors (administrators and boards of regents/trustees), constituents (faculty and students), and benefactors (taxpayers, legislators, and endowers) blend to create a turbulent environment in which deans must thrive" (Montez, Wolverton, & Gmelch, 2002, p. 241).

Tucker and Bryan (1988) correctly sum up the situation of the academic dean as being expected to be all things to all people. As support for this statement, Ellis (1991) has identified no less than 10 and as many as 46 discrete areas that faculty and administration expect from academic middle managers, and Tucker (1992) listed 54 different responsibilities. Academic vice presidents depend heavily on AMMs to fulfill the mission of their respective divisions, and Tucker and Bryan (1991) state that deans are judged constantly by the challenges they face and their actions and reactions to both problems and opportunities.

Changes to the field of higher education have affected the AMM position significantly, and future changes will continue to do so (Bensimon & Neumann, 1993). When AMMs assume their positions in management, they must deal with strained financial resources, the demand for relevant programs and curricula, external accountability pressures, technological advancement and its affects on educational delivery and their workplace in general, ill-equipped faculty who struggle to meet demands of the higher education system and their students, diversity issues, and an imbalance of professional and personal duties. AMMs are torn between the faculty they supervise and may have previously regarded as peers and the management above them. These AMMs experience daily the best and worst of the two vastly different worlds of a faculty member and an administrator. Because of the pivotal role the AMMs serve in their respective colleges, this population is important to study to uncover what affects their day-to-day performance.

Statement of the Problem

Within the TCSG, the role of the AMM is unclear and varied. Several factors contribute to the ambiguity of the AMM role within the system. First, the position title of these administrators has no standardization. As evidence of this lack of standardization, the term academic middle manager was adopted from the Dlabach study (2005) to describe the position in this study since no specific title is used consistently among all colleges. Some technical colleges have deans, some have directors, and some have department chairs/instructors serving in this AMM role. Because of this lack of standardization, only a weakly defined peer group network exists at the state level for AMMs. Strong peer networks are in place for executive academic management positions within TCSG such as those at the vice president level and president level. Even though the agency has created a peer network, the group could be strengthened by

including everyone who serves in the AMM role and by providing ongoing support and training for those in this role. At the time of this study was completed, the dean peer group had met only three times but also had a listserv available for those included in the peer group. According to Larry Roberson, Technical Educational Programs Coordinator for the TCSG, "The group has been very receptive of the peer group. There was little to no organized attempt to communicate at that level before" (personal communication, November 12, 2009). The peer group could benefit from further development by including all who serve in the AMM role, not just the deans and directors over academic affairs divisions.

The weak peer group for AMMs affects the interplay of factors in the CAMEO Model. For example, on a statewide level, there is not much opportunity to perform as a state peer group. Other peer groups throughout the TCSG have effectively worked to solve problems and brainstorm effective strategies to enhance efficiency and effectiveness. Lacking a strong peer group also works against ability because AMMs cannot learn from one another to improve ability in areas such as budgeting, scheduling, and evaluation of staff. This also affects motivation because if AMMs were able to communicate better with one another, they would motivate each other in areas that need improvement. Environment is also a factor that is affected by a weak peer group. Dealing with national and regional accrediting bodies, customers, and other external environmental factors could be handled more effectively and consistently if a stronger statewide peer group were used.

A second issue affecting AMMs is the shifting mission of the system. The mission of the TCSG is shifting to embrace academic education as well. Previously, the system's energy was devoted entirely to workforce development, and academic education was reserved for the University System of Georgia. The current focus of the TCSG is to place the system in a position

to prepare students to seamlessly transfer credit toward a four-year degree, if desired, while also focusing on workforce development. Therefore, to better align itself for transfer of credit and to provide more flexibility in scheduling classes, the TCSG has decided to focus on areas that will improve transferability of classes.

One emphasis has been for all of the technical colleges to become regionally accredited though the Commission on Colleges (COC) of the Southern Accreditation of Colleges and Schools (SACS). At the time this study was started in early 2008, 14 colleges of 33 lacked regional accreditation, and the pressure has continued for those institutions still not regionally accredited to gain regional accreditation through COC. For example, The State Board of Technical and Adult Education, in its publication entitled *The Department of Technical and Adult Education Strategic Plan 2002-2006, 2005 Update,* stated, "To further collaborations, cooperative projects, and affiliations among the technical colleges and other postsecondary institutions, all technical colleges have been encouraged to seek COC accreditation" (p. 13). According to the *Technical College System of Georgia Strategic Plan 2008-2012--*which was presented at the April 3, 2008, meeting of the State Board of Technical and Adult Education and recorded in the minutes of that meeting-- one of the goals of the agency is to "achieve and maintain SACS/COC accreditation by all System colleges" (p. 2).

The TCSG has also been actively working toward converting from a 10-week quarter system to a 15-week semester system. Although this conversion had not yet been approved at the time of this study due to the economic climate within the state and the high cost involved in making a change of this magnitude, the agency had begun the process of revising curriculum in program areas so that it would meet the requirements of a semester system. This conversion has been intended to improve the TCSG; however, a change of this magnitude has already been

stressful for faculty members, who have been required to work together on committees at the state level to rewrite curriculum to meet requirements of a semester system. Furthermore, instead of a simple 10-week quarter that would allow only one start and stop date, a semester system would allow multiple start and stop dates since shorter terms would be possible under this plan and could be used for any classes that could be effectively completed within a shorter term. Direct supervisors of faculty members are the AMMs in the system; therefore, AMMs will also experience a great deal of stress as the system navigates these turbulent waters of rapid change.

Even though many AMMs within the TCSG have not been required to teach, for those who have, teaching load has been an additional issue. Especially at the smaller colleges, teaching can be a large component of the AMMs' normal workload, and many times over half of an AMM's scheduled working hours constitute direct contact time with students. At these small colleges, funding may not have existed for even one dean of academic affairs who has only administrative duties, much less a dean for each academic division. As a result, department chairs over each of the locally established academic divisions have assumed the role of evaluating faculty peers and may have regularly taught significant course loads themselves as well as completing administrative duties normally reserved for a full-time administrator with no teaching requirements.

The *DTAE Policies and Procedures Manual* states that a full instructional load should be 25 direct quarter contact hours with students, so release time is subtracted from this amount. Since no statewide policy exists to address the course load of an AMM who is also required to teach, decisions are made at the college level how to handle the workload. Most technical colleges provide release time from classes to department chairs who fill the AMM role, but the amount of release time granted to each AMM varies by college since no statewide policy is in

place and sometimes varies even within individual colleges. The Vice President of Academic Affairs, with approval from the president of the college, is the ultimate decision-maker about release time for AMMs at each technical college in the system, and no state guidelines are yet in place to regulate this practice.

As stated earlier, the AMM role could benefit from better standardization at the agency level. The uniqueness of the TCSG in this time of rapid change within the system provided an opportunity to study the CAMEO model factors that have been shown in previous studies to be perceived influencers of AMM performance. The TCSG has made many changes already to improve its effectiveness as a technical college system, but the current state of the system provided an interesting arena in which to study its AMMs. Since AMMs are the go-between among faculty, senior administration, and local advisory boards, documenting the factors that AMMs themselves feel influence performance was of critical importance. This study sought to provide information that could be used to better support AMMs as the TCSG continues to grow and change.

Purpose of the Study

The purpose of this study was to determine to what extent AMMs in the Technical College System of Georgia report that CAMEO Model factors (climate, ability, motivation, environment, and opportunity to perform) influence the performance of their administrative duties. The research questions below were used in the study:

 To what extent do climate, ability, motivation, environment, and opportunity to perform (CAMEO Model) affect the performance of academic middle managers as instructional administrators in the Technical College System of Georgia?

- 2. How does the technical college's regional accreditation experience level (experienced, less experienced, and inexperienced) mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 3. How does a teaching requirement for AMMs mediate the relationship between the CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 4. How does the management experience of academic middle managers mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?

Background on the Technical College System of Georgia

Since this study focused on AMMs in the Technical College System of Georgia, a review of how this system developed is in order. The system first began with area trade schools funded by the State Board of Education in 1943, at the suggestion of Dr. M.D. Mobley, then the State Director of Vocational Education. In 1944, the first school of this kind (North Georgia Trade and Vocational School) opened in Clarkesville. In 1948, the second school (South Georgia Trade and Vocational School) opened in Americus. In the 1950s, W. M. Hicks, State Supervisor of Trade and Industrial Education, conducted numerous studies and attained the help of elected officials and industry experts to convince the State Board of Education to approve policies establishing Area Vocational-Technical Schools. By the late 1960s, 19 schools of this nature had been created in Georgia serving thousands of students. At the same time, legislation created Quick Start, which, according to *The Governor's Budget Report FY 2010*, continues to play "a key role in the

state's business recruitment and retention efforts by serving as a state training incentive" (p. 376).

In 1985, The Quality Basic Education Act (QBE) created a separate State Board of Postsecondary Vocational Education, which separated most of the technical colleges from local governance under the boards of education, and the system ultimately became the Department of Technical and Adult Education (DTAE) in 1988. In 1988 most of the state's adult literacy programs were also transferred to DTAE to work in conjunction with the technical schools and Quick Start. With the creation of DTAE, Georgia for the first time had a dedicated state agency that focused on the full scope of workforce development—literacy, technical education, and economic development.

In 2000, House Bill 1187 was passed and officially changed the technical institutes to "technical college" status. As an indicator of the significance this change had on the system, Dr. Ken Breeden, who was Commissioner of the Georgia Department of Technical Adult Education at the time of this change stated, "The change of the word 'institute' to 'college' will be one of the most significant changes in the history of Georgia's technical education system" (2000). He continued by saying that this change "put Georgia's technical education system on a level playing field with the community and technical colleges of other states" (Breeden, 2000). Most recently, the system was renamed the Technical College System of Georgia (TCSG) when Governor Sonny Perdue signed into law on May 13, 2008, the legislation that was passed to make the change. "'Georgia's technical colleges play a vital role not only in educating our citizens, but also in recruiting new industries through our top-ranked Quick Start training program,' said Perdue. 'Through significant investments in our communities across the state, Georgia has developed a technical college system that is the envy of the nation'" (*TCSG: 2008*)

Annual Report, p. 16., 2009). At a ceremonial signing of the bill a week later, TCSG Commissioner Ron Jackson stated that the timing was perfect for this renaming: "There's an exciting transformation going on right now where more and more students are seeing technical colleges as their first choice for the kind of education that leads to great jobs and fantastic careers," said Jackson (*TCSG: 2008 Annual Report*, p. 16., 2009).

At the time this study was begun, the Technical College System of Georgia was still officially called the Department of Technical and Adult Education (DTAE) with 33 main campuses. During the time of the study, along with the name change, came the decision to merge several colleges resulting in 26 technical colleges, 31 branch campuses, 7 technical education centers, and 2 technical education divisions housed within 2 of the University System of Georgia colleges. According to "Facts about the Administrative Mergers of 13 TCSG Colleges," updated March 2009 and posted on the TCSG Web site, "The state board that oversees the TCSG approved the mergers during their monthly meeting in September 2008 and reaffirmed the decision during their November 2008 meeting." This State Board of the Technical College System of Georgia is a 23-member group appointed by the governor to oversee the TCSG. Members of this state board serve for five years, and a special requirement of this appointment is that members represent business, industry, or economic development.

According to *The Technical College System of Georgia: 2008 Annual Report / 2009 College Directory,* "The new TCSG reflects the integrated system of programs that are at the very core of our mission: to provide the very best in technical education, adult learning and workforce training [Quick Start]" (p. 2, 2009). The technical education division includes all of credit programs ranging from technical certificates of credit (TCCs), to diplomas, to associate of science degrees. During FY 2008, the TCSG enrolled 145,990 students in more than 2,000 credit

programs including degrees, diplomas, and certificates. Furthermore, during FY 2008 more than 50,000 students took at least one online course, and 8,342 Georgia high school students participated in dual enrollment programs (*TCSG: 2008 Annual Report*, 2009). The second division, the Office of Adult Education, through its network of 37 service delivery areas, promotes adult basic education and literacy programs, including General Education Diploma (GED) testing. This program is the primary fiscal agent for the U.S. Department of Education adult literacy funds. The third division, Economic Development Programs, provides employee training services to new and expanding industries as well as existing industries at no cost through the nationally recognized Quick Start program. The following quote from the *Technical College System of Georgia: 2008 Annual Report / 2009 College Directory* (2009) shows how important Quick Start is to Georgia's economic development efforts:

Expansion Management magazine reported that its survey of site selection professionals in FY 2008 picked Georgia as No. 1 in the nation for workforce training. *Expansion Management*, a publication for businesses looking for locations to make new investments, surveyed professionals who advise companies where to locate facilities that create new jobs. The survey credited Quick Start, the TCSG's workforce training program, and Georgia's technical colleges for earning Georgia the top ranking. (p. 13)

In closing, the TCSG is a growing technical college system working to improve its services for the citizens of Georgia. The three divisions have different customers, but workforce development remains its main focus.

Theoretical Framework

The theoretical framework used in this study is the CAMEO Model, which was first presented by James. O. Hammons (1991) when he used all five factors of the CAMEO Model (climate, ability, motivation, environment, and opportunity to perform) as an acronym in a conference address to categorize the influences academic chairs experience in performing administrative responsibilities. Various researchers have studied what factors are involved in performance within an organization. Nine works (Blumburg & Pringle, 1982, 1986; Cummings & Schwab, 1973; Dlabach, 2005; Hammons, 1982, 1991; Lawler, 1985; Maehr & Braskamp, 1986; and Vroom, 1964) combined to provide the theoretical framework for this study.

Vroom's original study, published in 1964, identified motivation and ability as the most important influences on performance. Although different terminology is used, individual performance capability in Lawler's model is equivalent to ability in the Cummings and Schwab, Blumberg and Pringle, and Hammons studies. Lawler's model identified individual performance motivation as a factor, and this correlates to the motivation factor in Cummings and Schwab, Hammons, and Blumberg and Pringle models. Cummings and Schwab added climate in 1973, but mislabeled the factor as environment. Then Hammons in 1982 added environment. Blumberg and Pringle (1982) and Lawler (1985) added the factor opportunity to perform.

In 1986, Maehr and Braskamp included climate, ability, motivation, and environment in a study that explained performance in a theory of personal investment, but it was not until 1991 that Hammons (1991) used all five factors of the CAMEO Model (climate, ability, motivation, environment, and opportunity to perform) as an acronym. Hammons' conceptual model shows how the five factors influence performance. Dlabach (2005) then tested the CAMEO Model on AMMs in the community college system in Illinois, and the research showed the model has

validity. Below, the graphic shows the interplay of CAMEO factors in the conceptual model developed by Hammons:



Figure 1.1. Conceptual model showing the interplay of CAMEO factors on performance of academic middle managers. (Dlabach, 2005)

Interaction among CAMEO Factors

This section provides an explanation of the interplay of CAMEO factors on AMM performance. The CAMEO model illustrates that opportunity, motivation, and ability are at the core of AMM performance and interact heavily. As an example, pay structures and reward systems, considered elements of climate (Cummings & Schwab, 1973; Hammons, 1982), impact ability and motivation (Lawler, 1985). People are likely to engage in development activities that expand their ability when skill-based pay structures are used (Lawler, 1985). These pay structures compensate employees for the type of abilities they possess instead of the tasks performed at any one time (Lawler, 1985). Hammons (1982), the creator of the CAMEO model, on the other hand, supported a different viewpoint regarding motivation, saying that motivation is one's willingness to perform and that it is an internal pressure to use one's abilities successfully. This view of motivation is in line with needs-based theories such as Maslow's hierarchy of needs and Herzberg's two-factor theory. According to Maslow, individuals must satisfy lower-order needs first before seeking to satisfy higher-order needs. Herzberg's twofactor theory characterizes elements of the work environment that lead workers to be satisfied with their jobs (motivators) and elements that lead to job dissatisfaction (hygiene factors). Although positive hygiene factors may eliminate feelings of dissatisfaction, they will not necessarily motivate people. Motivators such as recognition, responsibility, and challenge are required as well (Daft, 2002). Daft (2002) defines motivation as the internal or external forces that create enthusiasm and a willingness to persist through a specific course of action.

Blumberg and Pringle (1982) showed an interactive model of performance that included capacity (ability), willingness (motivation), and opportunity to perform. These factors interact in a multiplicative manner so that if any one factor is absent, there is no performance (Blumberg & Pringle, 1986). If an opportunity to perform is not granted and if the AMM is not motivated and does not have the ability to perform, the AMM will not perform.

Perceptions of institutional and work-unit climate (internal) and work-related and personal environmental factors (external) also affect AMM performance. For example, Hickins (1998) reported that a supportive, flexible work climate could influence motivation and cause workers to "go the extra mile" to achieve goals of the organization more than pay or benefits. Climate has been shown to interact with motivation in other studies as well. For example, when workers are motivated to work and communicate in teams so that they feel inclusion and

affection, they experience stronger group cohesiveness (Anderson & Martin, 1995; Martin & Anderson, 1998). Environment has been shown to interact with ability. Wood and Bandura (1989) showed these two factors influence each other bi-directionally. In other words, people can be both producers and products of their environments (Wood and Bandura, 1989). The model graphically depicts the interaction of all five of these CAMEO factors.

Discussion of CAMEO Model

This section will briefly discuss the five factors that make up the CAMEO Model: climate, ability, motivation, environment, and opportunity to perform. These factors have been shown through numerous empirical studies to relate to perceived influence on performance. Each factor and the larger model will be more thoroughly discussed in Chapter 2. Climate is the first factor in the CAMEO model and has been defined in the literature to include feelings, emotions, and attitudes about a college's culture (Bailey 1988; Koys & Decotiis, 1991; McMurray, 2003). The second factor in the CAMEO model is ability. Ability refers to what the AMM can do (Hammons 1982). Ability also encompasses the characteristics that influence one's capacity to do a job (Cummings & Schwab, 1973), such as performing the administrative responsibilities expected of an AMM. Work experience and educational experience are examples of factors affecting one's ability to perform.

The third factor in the CAMEO model is motivation. Motivation is defined as being willing to use one's ability to perform administrative duties (Blumberg & Pringle, 1986; Hammons, 1982). Job satisfaction and one's perception of fairness also factor into the equation. For the academic middle manager in the Technical College System of Georgia, motivation is a factor that is continuously in question. Some AMMs in the technical colleges are torn between a faculty role and an administrator role. For example, some AMMs in the TCSG may teach up to

30 contact hours per week and supervise full-time and part-time faculty in the academic divisions that they oversee. These AMMs possibly find the workload to be overwhelming at times, negatively affecting their motivation to perform.

The fourth factor in the CAMEO model is environment. Environment has been defined in the literature to include the external factors that affect an academic middle manager's performance (Aharoni, Maimon, & Segev, 1978; Hellriegel & Slocum, 1996). External forces can be work related or personal (Blumberg & Pringle, 1982; Daft, 2002). Work-related environmental forces can include pressure from local or state governing boards, students, and faculty. Other external work-related forces include regional and specialized accrediting bodies, state legislatures, congress, and government agencies. The evolving regional accreditation issue within the TCSG is a prime example of an external factor that is at play within the system. All colleges within the TCSG are expected to become regionally accredited through the Commission on Colleges of the Southern Association of Colleges and Schools. Still other external forces might be factors such as vendors, technology, or trade and industrial organizations. These examples of external forces show the wide variety of influencers included in this category. Non work-related environmental factors include such forces as family and financial obligations as well as the time and effort expended to pursue a higher education or advanced training.

The final factor in the CAMEO Model is opportunity to perform. Opportunity to perform is what Herzberg (1968) defined as an opportunity for a manager to perform and receive feedback from a supervisor and institution, and leader behavior is a critical component of this opportunity to perform because sometimes administrators are not offered an opportunity to perform in areas of strength. According to Hammons (1991), there must be an opportunity to perform in order for one to perform, and the academic middle manager must be willing to use

skills, knowledge, and experience to complete a task. For example, AMMs in the TCSG usually report to the vice president of academic affairs. These AMMs are the first level of administration with much opportunity to perform since the vice president cannot be all places within the college at once. The vice president depends heavily on AMMs to make decisions regarding instruction; therefore, AMMs usually have ample opportunity to perform in their positions. The drawback is that many times, the AMM has too much opportunity to perform and may feel overwhelmed by the expectations of his or her supervisor. In summary, the five factors discussed above result in an acronym called CAMEO (climate, ability, motivation, environment, and opportunity to perform), which represents a model for performance of AMMs.

Significance of the Study

One of the most critical academic management positions in the TCSG is the AMM, yet this position has not been formally studied to determine the perceived influencers of performance among those in this position. The research that has been conducted on AMMs has not been within the TCSG and most has been conducted in 4-year institutions. The results of this study may influence the TCSG to review policies, practices, and procedures so that the TCSG can create work environments conducive to retaining high performing AMMs and make the role of the AMM less ambiguous across the system. Gmelch (2004) stresses that the academic department chair is one of the least studied and most misunderstood positions of management in the U.S. Therefore, any research that can be added to the sparse literature currently available should be welcome.

This study was a modified replication of a dissertation study conducted by Gregory Dlabach (2005) in the Illinois community college system. He states, "Further research applying the CAMEO factors to AMMs in the other 49 states is recommended" (p. 137). By studying

different two-year college systems in different states, the position of academic middle manager can be better understood. Once data is generated from multiple states, future studies can be conducted to compare and contrast the data to provide even more useful research to determine the factors that significantly affect performance of academic middle managers nationwide.

Although the population of this study was limited to AMMs in the TCSG, the results of this study may give insight to AMMs in other states who are part of two-year community and/or technical college systems. The results of this study may prompt educational researchers in other states to apply the study to their own community and/or technical college systems. Finally, according to Wild et al. (2003), "It is important to carry out research that may aid administrators, specifically deans, to be successful in managing the stresses they encounter in executing their role in community colleges." AMMs in many ways are the lifeblood of the community college and should have the support they need to maintain a healthy work environment to serve students and the community. This study sought to uncover AMMs' perceptions concerning factors influencing their performance.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this study is to determine to what extent academic middle managers (AMMs) in the Technical College System of Georgia report that the CAMEO factors (climate, ability, motivation, environment, and opportunity to perform) influence the performance of their administrative duties. The literature surrounding this study was divided into the following categories to better organize the information: Two-year Technical Colleges, Academic Middle Managers, Climate, Ability, Motivation, Environment, Opportunity to Perform, and the CAMEO Model.

Two-year Technical Colleges

Two-year colleges play a key role in workforce development and access to higher education. Most of these institutions started out as junior colleges stemming from high schools and providing the first two years of a bachelor's degree. In 1916, 74 two-year colleges existed in the U.S.; however, by 1960, 677 two-year colleges existed (Cohen & Brawer, 1989). In the 1970s and '80s, occupational and technical programs were added. After the passage of the federal Vocational Education Act in 1963, money was allocated for technical education as never before. "Congress appropriated funds generously--\$43 million in 1968, \$707 million in 1972, and \$981 million in 1974—and these funds were augmented with additional monies for occupational programs for the disadvantaged and for students with disabilities" (Cohen & Brawer,1996, p. 213). This surge of monies caused technical and occupational education to become a critical mission of the two-year colleges. Prior to the Vocational Education Act of 1963, two-year colleges focused primarily on traditional liberal arts and general education, but even in the early 1900s, occupational education was an area of interest (Cohen & Brawer, 1996).

Terminology used to refer to technical education has never been precise. According to Cohen and Brawer, "the words *terminal, vocational, technical, semiprofessional, occupational,* and *career* have all been used interchangeably or in combination, as in *vocational-technical*" (1996, p. 216). The mission of two-year colleges has also never been precise. According to Palinchack, "America's two-year colleges continue to evolve from several different forms. There never was a single prototype institution or model" (1998). Jamilah Evelyn reports the following:

As politicians try to pump the institutions' job-training components while hordes of highschool graduates—shut out of four-year institutions by rising academic standards and cramped capacity—flock to their open doors, the identity and stature of the nation's 1,200 community and technical colleges have perhaps never been more in flux (2004, p. B. 1).

Academic Middle Managers

Thomas A. Emmet gives a brief history of the academic middle manager position in the foreword of Bennet's (1983) book entitled *Managing the Academic Department*. From 1636 when Harvard was founded until after the Civil War, the president of the college served all administrative roles. In 1792, the title of dean was first used when Samuel Bard was assigned to the head of the medical college at Columbia University. The title of dean was used because it was determined that the university could not have two presidents. In the late 1800s the advent of the land-grant university at Cornell, the founding of the graduate schools at Johns Hopkins and Clark University, and administrative reforms at Harvard prompted the development of department chair positions. Also noted by Emmet is that after World War II, community colleges

adopted an organizational structure that used academic divisions headed by a chairperson with limited teaching duties. Liberal arts colleges adopted this structure in the 1960s to replace their former departmental structure.

Most AMMs of two-year colleges began as faculty members and were ultimately named chair or dean (Miller & Seagren, 1997; Seagren & Miller, 1993; Twombly, 1988). Seagren and Miller conducted a survey of community college chairs and department heads in 1993 that revealed the mean age between 45-54. Also, 59 percent were men, 89 percent were Caucasian, and 97 percent had been faculty members within the community college. Most reported that they were experienced with more than a third showing 1-5 years of experience and an average length of experience between 6-10 years (Seagren & Miller). The survey collected information in four main areas: characteristics of department chairs, responsibilities of the position, challenges of the position, and response strategies used by department chairs. The results gave the first comprehensive study of the department chair position in community and technical colleges and gave information needed to ensure that good leadership training topics would be addressed through Chair Academy initiatives. Seagren et al (1994) correctly sum up the AMM as

...a juggler who initiates, controls, and halts objects being juggled. These objects may be competing priorities, interests, agendas, and expectations. And the chair is in the middle feeling the pressures of the objects in flight, delicately balancing interests, and hoping that the final act will receive a standing ovation. (p. ix)

Similarly, Russell (2000) found in the 2000 National Survey of Community and Technical College Academic Deans that almost half of the respondents were in the 47-55 age group. A total of 54 percent were male and 92 percent were white. The average years of

experience were 5.4 and a mean of 9.7 years of additional administrative experience was reported. Therefore, not much had changed since the Miller and Seagren 1993 survey.

Throughout the years, researchers have indicated skills that AMMs in two-year colleges should have. Budgeting skills are of critical importance for AMMs and surfaced in five studies (Bragg, 2000; Miller & Seagren, 1997a; Robillard, 2000; Walker, 2000; and Wharton, 1997).

Climate

In the CAMEO model, the first factor to be studied is climate. Climate refers to the attitudes, feelings, and emotions that organization members have about the culture of the organization (Koys & DeCotiis, 1991; McMurray, 2003; Schein, 1985). Characteristics of climate include leader behavior, responsibility, status, standards, workloads, reward systems, interaction between colleagues, and degree or conformity (Hammons, 1982). Koys and DeCotiis (1991) conducted a review of the literature on climate and discovered 80 discrete characteristics of climate, which were then collapsed into eight main categories and tested with a survey of managers in the hospitality industry. The eight categories were autonomy, trust, cohesiveness, pressure, support, recognition, fairness, and innovation. The survey of managers in the hospitality industry found that support, trust, recognition, and cohesiveness were valid dimensions of climate. The study and instrument assumed that climate reflected prevailing values and attitudes of members in the organization toward organizational culture (Koys & DeCotiis). Similarly, McMurray in a survey in 2003 of 128 managers from a new university analyzed the relationship between climate and culture. McMurray concluded that the collective perception of culture provides raw material for the climate of an organization.

According to Hammons (1982), although climate is not the most important factor of influence on management performance, it is one of the three major determinants of performance.
Task design, leader behavior, and reward systems are three components of climate identified by Cummings and Schwab (1973). Hammons in his 1982 study differentiated climate as internal factors and environment as external factors. Climate can be determined by how people feel, and a culture can be determined by the way things are. Schein (1985) wrote a book and devoted his career to the distinction made between culture and climate when he substantiated this difference in his book.

In 1994 Edwards surveyed 250 principals and teachers about attitudes surrounding the interaction between climate and leadership styles. The study used the Organizational climate Description Questionnaire (OCDQ) to collect attitudes about climate. The instrument used three dimensions of principal behavior: supportiveness, flexibility, and autonomy for others and himself/herself. Three dimensions of teacher behavior characterize climate: commitment, collegiality, and intimacy. Edwards found the greatest significance only in the dimensions of intimacy and supportiveness. However, all six had a combined reliability of .78. Since experts have recognized .70 as the minimum standard for reliability in social sciences (Heppner and Heppner, 2004), all six OCDQ dimensions are reliable measures of climate and used as elements of climate in this study.

A separate study of school climate surveyed 267 teachers to determine attitudes about trust and principal behaviors (DePasquale, 1996). The four dimensions of principal behaviors were buffering, caring, involving, and praising, which meant the principal was supportive of teachers and permitted teachers' input and provided rewards systems. There was a strong correlation found between levels of trust in the environment and all three principal behaviors.

Hutchison (1996) surveyed 253 administrators from the two-year college system in Washington State for opinions toward satisfaction, job performance, and managerial skill

development. He found highly satisfied administrators viewed their supervisors to be supportive, flexible, and available when discussing professional development options.

Gayton (1999) surveyed 822 teachers in West Virginia concerning the correlation between climate and accreditation. The instrument used was the *Charles F. Kettering, Ltd. School climate Profile (SCP).* The SCP, used widely in educational research, has eight subscales (respect, trust, high morale, opportunity for input, continuous academic and social growth, cohesiveness, school renewal, and caring) and an internal consistency of .96. Teachers in unaccredited schools rated their school climates lower on every SCP subscale except opportunity for input.

In a survey of 128 administrators in one university, McMurry (2003) found climate at the organizational level and the work unit level to influence attitudes and decisions directly. Attitudes were positive when the climate of the overall organization and the climate of the work unit were aligned. However, when the two were opposed, workers had negative attitudes.

A recent study by Wolverton, Ackerman, and Holt (2005) examined how climate affected midlevel academic leaders at the University of Nevada Las Vegas. The study researched how well prepared department chairs were to assume leadership roles in their respective divisions. The study identified what department chairs should know to be effective leaders and outlined an approach to prepare department chairs based on the data gathered in this multi-level needs assessment. Since the characteristics of climate had been identified through research to include leader behavior, responsibility, status, standards, workloads, reward systems, interaction between colleagues, and degree of conformity (Hammons, 1982), this study supported climate as a factor that would influence performance.

Ability

The second factor in the CAMEO model is ability, which includes level of educational achievement, educational experience, years of relevant work experience, age, health, and endurance. Cummings and Schwab (1973) stated that ability includes the characteristics that affect someone's capability to do a set of tasks. In this study, the tasks are duties of academic middle managers. Cummings and Schwab (1973) stated that preparation, qualifications, and experience determine ability. Hammons (1982) added to this by defining ability as what a person can do, including abilities such as numerical, verbal, manual, physical, psychomotor, and spatial skills, stressing that ability is a function of development, training, orientation, selection, and experience.

Lalwer (1985) showed ability to include three different components: the skills possessed at the time of employment; the number, type, and effectiveness of the development opportunities provided; and the degree to which people are motivated to build skills. Most jobs, however, don't show a direct relationship between job performance and educational level.

In an attempt to refine Vroom's 1964 model of performance, Blumberg and Pringle (1982) replaced ability with capacity to perform, which included ability, age, health, knowledge, skills, intelligence, level of educational attainment, endurance, stamina, energy level, and motor skills. Furthermore, a review of the literature on ability by Dickson (1992) discovered empirical evidence supporting experience, adaptability, and ability to learn quickly. Able managers can view information for many differing perspectives and assimilate it without bias. Dickson (1992) also found able managers could accurately forecast changes in the environment. Good managers can predict problems, thus requiring them to stay current with literature and networks and opportunities for development.

Waldman and Spangler (1989) found in a literature review that experience, job knowledge, and cognitive ability predict job performance. Empirical evidence shows tests of cognitive ability have strong predictive validity to individual job performance (Hunter & Hunter, 1984; Schmidt, 1988; Schmidt & Hunter, 1998). However, since mean score differences exist between Blacks and Whites on cognitive ability tests, employers tend to avoid them when selecting diversified workforces (Schmidt, 1993).

A 1991 survey of 50 Black female community college administrators conducted by Johnson (1991) found significance in the influence of cognitive abilities on job performance. The instrument collected attitudes towards twenty factors with verbal skills, writing skills, education, leadership abilities, and self-worth having the most significant influences on performance. Age, experience, and overall state of health were also strong predictive factors of job performance (Johnson, 1991).

Motivation

The third factor in the CAMEO Model is motivation, which is one's willingness to use ability to perform a task and includes one's job satisfaction and perception of fairness. Motivation is one of the most widely researched and supported factors that affect job performance (Rabey, 2001). Vroom (1964) established motivation and ability in his seminal work as the two major determinants of job performance.

In 1973 Cummings and Schwab defined motivation to be the extent of energy spent by an individual to determine the application of that individual's abilities. Three issues were found to influence motivation: state of arousal, motivational process, and maintenance over time. The state of arousal is the intensity of motivation needed to engage in any behavior. Motivational

process is the mechanism through which motivation is channeled toward performance, and maintenance of motivation is the mechanism that sustains the individual's behavior over time.

Hammons in 1982 defined motivation as the willingness to perform, an internal pressure that forces someone to use his or her abilities. The question is not what is one able to do (ability), but what is one willing to do? Many factors affect motivation such as rewards, individual goals, job satisfaction, and intentions. In order to be effective, rewards need to be connected to performance and attractive (Lawler, 1985).

Blumberg & Pringle (1982) defined motivation as the willingness to perform, and the willingness dimension included psychological and emotional factors that influenced the degree to which a person wants to do a task. The willingness area included personality, job satisfaction, self image, anxiety, job involvement, perceived role expectations, need status, values, personality, and task characteristics (Blumberg & Pringle, 1985).

Numerous studies have been conducted regarding motivational theories, and two categories have emerged: Needs-based Theories and process theories (Kini & Hobson, 2002; Daft, 2002). Daft (2002) defines motivation as internal or external forces that arouse enthusiasm and persistence to pursue a specific course of action. Needs-based theories focus on the needs that motivate people. For example, Maslow's Hierarchy of Needs is a needs-based theory. According to Maslow, a person cannot satisfy a higher-order need such as self actualization before satisfying a lower-order need such as hunger or safety. Herzberg (1968) developed a twofactor theory that is also a needs-based theory of motivation. Positive hygiene factors may remove dissatisfaction, but do not necessarily produce highly satisfied and motivated people, which requires motivators like challenge, responsibility, and recognition (Daft, 2002).

Process theories, on the other hand, stress punishments and rewards. One type of process theory called reinforcement theory uses immediate feedback in the form of rewards or punishments to alter behavior (Daft, 2002). Another type of process theory called expectancy theory deals with the cognitive processes and how people use these cognitive processes to earn rewards. For example, if people feel their ability is up to a task, they expect effort will result in reward (Daft, 2002). A third type of process theory called equity theory proposes people are motivated to seek fairness in rewards they expect.

Janssen (2001) conducted a study that surveyed 99 managers in a European industrial food processing organization. Managers reported opinions about interactions among job satisfaction, fairness, job performance, and job demands, and the research found that managers were more highly satisfied if they perceived fairness between effort and rewards and this positively affected performance levels.

In 2002 a survey of 254 Midwestern members of the American Society for Quality Control collected perceptions of the influence of motivation on the successful or unsuccessful implementation of total quality programs (Kini & Hobson). This study found that a combination of expectancy theory and goal setting most likely produced success. Another study by Amaratunga and Baldry (2002) suggested blending equity and satisfaction theories in their discussion of motivation's influence on facilities managers.

Environment

The fourth CAMEO factor to be reviewed in the literature is environment. This study defines environment as the work-related and personally-related external forces that influence a person's performance (Aharoni et al., 1978; Hellriegel & Slocum, 1996). Work related forces are pressures from students, local and state governing boards, advisory committees, and faculty.

Other forces include the state legislature, trade and industrial organizations, government agencies, Congress, regional and specialized accrediting agencies, vendors, and technology. Personally related environmental factors that do not relate to work that may affect performance are factors such as family commitments, personal finances, and other personal obligations.

One study that analyzed the effects of the environmental factors of government, employees, the market, suppliers, owners, and public opinion on management performance found that management spent the most effort on the environmental factors that would provide the greatest autonomy from the influence of that segment. In other words, environment heavily influenced manager's performance (Aharoni et al., 1978).

Luo and Peng in a 1999 study discovered three environmental dimensions: hostility, dynamism, and complexity. Factors like culture, competitors, customers, suppliers, society were drivers to identify these dimensions. The effect of the environment on management's performance was proportional to these dimensions of the environment.

Wolverton, Gmelch, and Wolverton (2000) conducted a study on issues relating to environment that identified personal, institutional, and work-defining variables that either promote or reduce stress and either enhance or limit Person-Environment fit. The researchers found that deans and their institutions must work together to improve the P-E fit for academic deans, and five strategies were suggested. First, universities should understand the college's long-term effects and short-term needs when hiring someone. Second, deans should set realistic goals for themselves and not get into a situation where they feel they are victims of the system, which can result in workaholics, perfectionists, and idealists. Third, deans should not have to give up their past identities altogether when they become deans. Deans' schedules can be arranged in order to free up some time for scholarly projects. Fourth, inadequately funded

requirements will lead to failure at some level. Deans should not be expected to produce results if funding isn't adequate to see a project through to completion. Finally, good leaders are in demand and can find more lucrative and satisfying employment many times outside education. Therefore, avoid pressuring deans out of their positions. This article is particularly useful background information for this study because the environment of the technical colleges that have not received COC accreditation is very different from the environment of those colleges before deciding to undergo the COC accreditation process. These colleges without regional accreditation status are not "in the club" so to speak; therefore, these colleges that lack regional accreditation feel a pressing need to become accredited.

Opportunity to Perform

According to Fredrick Herzberg (1968), "The only way to motivate the employee is to give him challenging work in which he can assume responsibility" (55). This quote qualifies opportunity as a separate and necessary condition for job performance (Lawler, 1985). In the Cummings and Schwab (1973) model of performance, the researchers refer to opportunity to perform in their description of an environmental factor labeled leader behavior. If a manager gives enough fiscal, human, and technical support and also trusts the employee with the independence to perform, good performance could be the result. Effective leaders also should, of course, coordinate work so as to remove barriers to the performance of tasks, which is the critical component of the opportunity to perform. Lawler (1985) and Cummings and Schwab (1973) use very similar language when discussing opportunity to perform. Lawler stated that managers by creating communication, coordination, and control mechanisms can influence performance and concludes that opportunity deserves a status as a separate factor by itself as a component necessary for performance.

In 1982 Blumberg & Pringle (1982) suggested adding to motivation and ability the "opportunity to perform" factor and characterized it as a missing or overlooked influence in the classic performance constructs to date (Blumberg & Pringle, 1982, 1986). They defined opportunity as follows: "Opportunity consists of the particular configuration of the field of forces surrounding a person and his or her task that enables or constrains that person's task performance and that are beyond the person's direct control (Blumberg & Pringle, 1982, p. 565)." Opportunity to perform included working conditions, technology, actions of coworkers, leader behavior, mentoring efforts, organizational policies, information, time, pay, rules, and procedures (Blumberg & Pringle, 1982). The problem with this construct is that it overlapped climate. However, they were attempting to include in one factor all of the factors that influence performance that are not attributable to motivation or ability. These researchers proposed that managers should provide a good environment in the workplace and should provide opportunities for performance through delegation, mentoring, and modeling desired behavior.

Delegation has since become a critical and well-documented component of leader behavior that affects job performance (Amaratunga & Baldry, 2002; Dawson, 1986; McGregor, 1960). Amaratunga & Baldry (2002) added elements of job enlargement, participation, goal setting, and performance appraisal to opportunity.

Kini and Hobson (2002) surveyed 254 Midwestern members of the American Society of Quality Control about attitudes toward motivation, performance, and successful implementation of total quality programs. When managers clearly understood what was expected of them and were given authority to make decisions about implementation, performance improved.

Literature Surrounding CAMEO Model

Maehr, and Braskamp (1986) included climate, ability, motivation, and environment in a study that explained performance in a theory of personal investment. However, it was not until 1991 when James O. Hammons, a professor of higher education at the University of Arkansas, developed a conceptual model and used all five factors of the CAMEO Model (climate, ability, motivation, environment, and opportunity to perform) as an acronym in a national conference address to help classify the influences experienced by academic chairs when performing their administrative duties (Dlabach 2005).

A doctoral student of Hammons, Gregory Dlabach (2005) added to Hammons' research with his own cross-sectional survey in the system of community colleges in the state of Illinois. Dlabach's study determined the extent to which AMMs in Illinois community colleges perceived factors in the CAMEO model (climate, ability, motivation, environment, and opportunity to perform) affected performance as instructional administrators. Dlabach discovered that ability was the strongest factor with a mean response of 6.13 out of a possible top score of 7. The mean response for climate (how the AMM feels about things within the unit supervised) was 5.73. The mean response for motivation (willingness to use skills, knowledge and experience to accomplish a task) was 5.72. The mean response for opportunity to perform (matching skills and interests with responsibilities) was 5.54. Finally, the mean response for environment (factors like pressures from faculty unions, state and federal agencies, and accrediting bodies) was 4.38. Dlabach was surprised that environment was the weakest factor but attributed this discovery to the flexibility and resilience of the AMM. Dealing with environmental forces is simply a part of the daily routine.

Summary

The purpose of Chapter 2 was to develop and refine the established definitions for each of the CAMEO factors. These definitions were derived from the literature surrounding each factor: climate, ability, motivation, environment, and opportunity to perform. These factors have been supported by previous research to influence the performance of managers. Although the CAMEO Model has been applied to a community college system, a technical college system has not been studied, especially one like the Technical College System of Georgia, which is currently undergoing substantial changes to improve service to its students and other customers.

The results of this study will help those in key instructional leadership positions within the system to identify the CAMEO factors and develop strategies for improving performance of academic middle managers. Results from this study may initiate staff development efforts within the Technical College System of Georgia to better train its academic middle managers since a prevailing theme of the literature suggests that most academic middle managers are given mixed messages and unclear definitions of work, leaving AMMs underprepared to carry out the tasks expected of them (Wolverton, Ackerman, and Holt, 2005; Wild, Ebbers, Shelley, & Gmelch, 2003).

Being held more closely accountable by external agents (regional accrediting bodies), having to become ever increasingly more flexible to meet student demands, needing to adjust to curriculum and course content that may change to meet educational reforms, and managing a flattened or diminished budget are important challenges shown by Warton (1997) to be facing community colleges. Since the AMMs in the TCSG have such a critical influence on day-to-day management of the academic divisions, it is imperative that researchers gain a better understanding of this position and what influences AMM performance. Chapter 3 will justify the

use of a questionnaire to probe into this area of research and will present the methodology used by the researcher to analyze the data.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

The purpose of this study was to determine to what extent academic middle managers (AMMs) in the Technical College System of Georgia report that CAMEO model factors (climate, ability, motivation, environment, and opportunity to perform) influence the performance of their administrative duties. The research questions that guided this study are listed below:

- To what extent do climate, ability, motivation, environment, and opportunity to perform (CAMEO Model) affect the performance of academic middle managers as instructional administrators in the Technical College System of Georgia?
- 2. How does the technical college's regional accreditation experience level (experienced, less experienced, and inexperienced) mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 3. How does a teaching requirement for AMMs mediate the relationship between the CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 4. How does the management experience of academic middle managers mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?

Design of the Study

This study was conducted using a cross-sectional survey incorporating a mixed methods design. A cross-sectional design enables researchers to collect data on current practices and attitudes at one point in time (Creswell, 2002). The cross-sectional design seems the most appropriate choice because a cross-sectional survey design will allow the researcher to examine current attitudes, beliefs, and opinions of AMMs and provide results of the study in a short amount of time (Creswell, 2002).

Because of the nature of the subjects studied, the researcher used an electronic questionnaire administered through SurveyMonkey. The primary reason an electronic survey was used is that all academic middle managers had reliable access to e-mail on their desktops at work throughout the day and were already familiar with completing online questionnaires due to the nature of their work. The ease of completing an online survey as opposed to a paper-andpencil survey was also a factor since the online survey did not require return through the mail. The survey link was e-mailed to each identified AMM in the Technical College System of Georgia by SurveyMonkey. An e-mail collector feature of SurveyMonkey was used so that participants in the study could be tracked and the researcher could determine the AMMs who had not yet completed the survey.

Questionnaire Modification

The researcher modified a cross-sectional survey design questionnaire developed for a similar study by Gregory Dlabach (2005) using a 7-point Likert scale. Subjects identified to what extent they were influenced by the CAMEO Model factors. A score of 1 corresponded to "no influence," and a score of 7 corresponded to "strong influence." After gaining permission from Dlabach (see Appendix A) to use the instrument he developed for his dissertation study (2005),

the researcher and her committee determined several ways to strengthen the questionnaire to better fit the population in this study.

One significant change to improve the quality of data collected was the conversion from all close-ended questions to semi-closed-ended questions. According to Creswell, "This type of question has all the advantages of open-and closed-ended questions. The technique is to ask a closed-ended question and then ask for additional responses in an open-ended question" (2002, p. 364). The questionnaire provided a text box after each question that asked respondents about how a CAMEO factor influenced them to perform so that subjects could qualitatively explain their ratings of each factor and indicate if the influence experienced was a positive or negative influence. Eight sets of explanations for rankings were generated, and the researcher coded them to see the predominant direction of the responses. At the additional suggestion of a committee member, a ninth open-ended question was added at the end of the survey to allow respondents to make any further comments they would like to make regarding the role of AMMs in the TCSG. A copy of the final instrument is included in Appendix B.

Another change was to rephrase the eight questions about the factors in the CAMEO Model to make them more concise. For example, the first item dealing with institutional climate previously read, "Please indicate your perception of the extent to which climate, as defined above, has influenced the actual past performance of your administrative responsibilities as an academic middle manager." This item was rephrased to be more concise by saying, "To what extent has climate, as defined above, influenced actual past performance of your administrative responsibilities as an academic middle manager." Since subjects responded solely on their perceptions, providing explicit terminology letting the subjects know that the responses would be based on their perceptions was not necessary. Furthermore, since the questionnaire was delivered

online through SurveyMonkey, the formatting of the Likert scale allowed the terminology for "no influence" or "moderate influence" or "strong influence" to be included in the area where subjects clicked on the numbers. Therefore, this information did not have to be written out within each item of the questionnaire, making the questionnaire more concise. These changes were made on each item in the questionnaire in the same manner so that the items were more concise and more readable.

Although the CAMEO Model has five factors (climate, ability, motivation, environment, and opportunity to perform), Dlabach created two questions each for climate, motivation, and environment due to information in the literature that divided the definitions of each of these terms into two different parts. The factors "ability" and "opportunity to perform" had only one item each resulting in a total of eight questions in all to cover the CAMEO factors. Changes were made in the headings and in the wording of the two items dealing with motivation. The first item dealing with motivation stated motivation "can be quantified through feelings of satisfaction and perceptions of fairness." However, the item was intended to focus only on feelings of satisfaction, and the second of the two items covering motivation was intended to focus only on the perception of fairness. To eliminate confusion, the sentence quoted above was removed, and the revised item focusing on feelings of satisfaction did not mention perception of fairness.

The remaining questions asked for demographic data designed to help the researcher answer the second, third, and fourth research questions, which assessed institutional COC accreditation experience level, teaching requirements, and management experience. For example, item 3 in the Demographic Information section of the original survey asked for the percentage of time an AMM spends teaching. This question was revised to ask the number of contact hours, making the question easier for subjects to answer. Also, items 4 and 5 from the original

questionnaire were removed because these questions asked subjects about the academic unit(s) they supervised. Since no research question for this study dealt with this information, these questions were removed.

The original questionnaire asked for the number of years of experience the AMM had in certain positions. This study's questionnaire was modified to use only position titles routinely used in the Technical College System of Georgia, such as Director of Adult Education, Dean/Director of an Instructional Division, Department Chair, Management Outside Field of Education, Management Position in a Different Education System (K-12 or Higher Education). The instrument was also changed to include a pull-down menu of choices from 1-40 instead of a box for subjects to type in the number of years of experience.

Pilot Test

The revised CAMEO Questionnaire was pilot-tested by two people who formerly served as AMMs within the Technical College System of Georgia. Feedback and suggestions from these individuals helped to further strengthen the instrument. These individuals were chosen because the researcher did not want to reduce the size of the already limited population to be studied. Therefore, no current AMMs in the system were asked to pilot-test the questionnaire.

Population

When the study was begun, 165 AMMs were identified in the 33 technical colleges of the TCSG. The vice president of academic affairs at each technical college directly supervised the vast majority AMMs that were the population in this study. However, there were a few AMMs identified for this study who reported to a different vice president in the college or the president of the college instead of the vice president of academic affairs. These AMMs supervised the adult education programs. Because these supervisors of adult education divisions directly

supervised full-time and adjunct faculty, they met the requirements of an AMM within the system. AMMs in the Technical College System of Georgia were referred to as deans, directors, or department chairs over specific instructional divisions in the college, and these middle managers were the population studied.

Because of the lack of standardization across the system for the role of academic middle managers, identifying all AMMs within the TCSG was problematic. Each AMM within the system had a publicly posted e-mail address in a directory on the Web site of the technical college where he or she was employed. However, each college Web site had its own method of organizing information, and identifying the AMMs through directories alone was impossible because of the variance in titles used among the technical colleges in the system. These titles did not always reflect to an outsider of the college that the title was an academic middle management position at that college. For example, a department chair at Sandersville Technical College was an AMM, but a department head at Central Georgia Technical College (a comparable role and title) was not an academic middle manager because Central Georgia Technical College had deans serving the role of AMM over the academic divisions. Because there was no statewide directory of AMMs, after searching each college's individual faculty/staff directory, an e-mail message was sent out to all vice presidents of academic affairs within the TCSG. AMMs that were not already identified through directories on college Web sites were then identified and those previously identified were confirmed. The names, various position titles, and e-mail addresses were then compiled into an Excel spreadsheet for later use. A total of 165 AMMs were identified to be surveyed, excluding the researcher who was also an AMM in the system. However, because some of the AMMs identified had already vacated their positions by the time the study was actually conducted, the researcher ended up with a corrected population of 150

AMMs, each of whom had been in his or her role for at least one year. Creswell (2002) suggests a sample size of at least 350. Since the population of AMMs in the TCSG does not reach this number, it was necessary to survey the entire population.

Data Gathering

The first step in gathering data for this study was to obtain permission from The Technical College System of Georgia and the Institutional Review Board (IRB) at the University of Georgia to administer the questionnaire. The survey was exempt from full human subject review since confidentiality was maintained and information was not sensitive in nature. After receiving approval from the IRB, the next step was to send an e-mail to all of the identified AMMs in the Technical College System of Georgia to serve as a letter of transmittal. By completing the questionnaire, AMMs gave their consent to be subjects in the study (Birnbaum, 2000; Dillman, 1978). This e-mail contained a request to complete the survey and included language of implied consent. The e-mail included a coded hyperlink to and instructions to prompt subjects to proceed to the survey site. The e-mail of transmittal also identified the researcher as one of the AMMs in the TCSG.

After one week, the researcher emailed the subjects who had not responded to remind the subjects to complete the survey. After each additional week, subjects that had not responded were emailed again to encourage them to participate in the study. At one point, the researcher emailed a non-coded link to those who had not completed the questionnaire; however, the researcher quickly realized that this was a mistake because she could not identify the respondents of the non-coded returned questionnaires and then did not know who had not completed the questionnaire. Therefore, this non-coded link was not sent out again, and the four responses that

were not identified were thrown out. A total of 95 usable responses were received from the total group of 150 AMMs, which constituted a 63 percent response rate.

Analysis

First, descriptive statistics for each item were analyzed. Afterwards, the means for the two climate items were collapsed into one single statistic. This could be done because of a high alpha coefficient (0.866), showing that the two items (institutional climate and work-unit climate) were highly related. However, since the alpha coefficients were low for the two items dealing with motivation (satisfaction and perceived fairness) and the two items dealing with environment (work-related and non-work-related), these were not collapsed into one single score. These low alpha coefficients (0.439 for the pair of motivation questions and 0.320 for the pair of environment questions) showed the items were not strongly enough related to collapse into one overall score for each pair. As a result, the two climate items were collapsed, but the remaining six items were left separate, resulting in seven different mean scores: climate, ability, motivation1 (satisfaction), motivation2 (perceived fairness), environment1 (work-related external forces), environment2 (non-work-related external forces), and opportunity to perform.

The next step was to prepare a data file for analysis. The researcher used SurveyMonkey to facilitate the design and deployment of the survey and the collection of the data. Then the raw data was organized and entered into Excel spreadsheets so that some of the data could be analyzed quantitatively through the use of SPSS. The qualitative data was also entered into Excel spreadsheets so that the responses to each open-ended question could be coded for emerging themes, resulting in a code book of emerging themes in the responses to each open-ended question.

Quantitative Data

To analyze the quantitative data for Research Question 1, the CAMEO means were ranked to show the overall importance of each CAMEO model factor in relation to one another. By doing this, one could visually picture the CAMEO means and better identify possible differences between the categories. Next, a repeated measures ANOVA was conducted to determine any statistically significant differences in mean scores. Repeated measures is a term used when the same participants participate in all conditions of an experiment. This study had eight conditions: the eight questions about CAMEO factors.

The use of repeated measures ANOVA in this study was not a typical use of the design. A repeated measures design can be used to analyze three different situations. First, participants can perform a task during testing periods that are separated by a certain amount of time. A second approach is to measure participants several times during one testing period, performing a different treatment each time. Finally, participants can be measured on multiple characteristics during one testing period, for example, measuring participants' views on the multiple factors that constitute the CAMEO Model. In this study, the AMMs were asked to rank the level of influence of each CAMEO factor; therefore, AMMs could indicate whether one of the factors was more influential than another. Since the data for the different conditions (the different CAMEO factors) came from the same people, data from the different conditions were related. Because of this, the repeated measures ANOVA required an assumption of sphericity. The assumption of sphericity simply assumed an equality of variances of the *differences* between treatment levels (Field, 2009). If each pair of treatment levels was calculated to show the differences between each pair of scores, then these differences should have approximately equal variances in order for the assumption of sphericity to be met. When the assumption of sphericity is violated, there

are several well-accepted corrections that can be applied to produce a valid *F*-ratio. These corrections are based on estimates of sphericity advocated by Greenhouse and Geisser (1959) and Huynh and Feldt (1976). Since the Greenhouse-Geisser correction estimate was a more conservative estimate (Field, 2009), it was used in this study.

To answer the remaining three research questions, a multivariate analysis of variance (MANOVA) was conducted. Although Dlabach (2005) continued using the repeated measures ANOVA along with a regular ANOVA to produce an analysis called a mixed repeated measures design, the researcher counseled with her advisor and several statisticians to determine that a MANOVA could be more efficiently used to determine whether group differences existed. MANOVA can be regarded as an ANOVA in situations when the researcher has several dependent variables. For the MANOVA, the dependent variables were the different factors that made up the CAMEO model and the independent variables were the grouping variables. The MANOVA created a grand mean and assisted in controlling for Type I errors (or false positive results) by testing for differences on more than one dependent variable by an independent grouping variable (Coolican p. 495). A number of bivariate tests increase the risk of Type I errors; for this reason, multivariate comparisons were also conducted to assess the collective effect of the independent variables/dependent variables (Stevens, 2002). The MANOVA used the F test, "which is the ratio of two independent variance estimates of the same population variance," (Pagano, 1990, p. 329). The F test allowed the researcher to make the overall comparison on whether group means differed.

As stated, the researcher used MANOVA to analyze data and answer the remaining three research questions because MANOVA tells whether group differences exist across multiple dependent variables. To respond to the second research question, between-group effects were

analyzed for regional accreditation status (experienced, less experienced, and inexperienced). Respondents were grouped into three categories based on regional accreditation experience level of each technical college. This information was important to the study because gaining regional accreditation for all of the technical colleges in the system has been an ongoing issue within the Technical College System of Georgia, and the literature and theoretical model suggested that accreditation experience level may matter since accrediting bodies are strong environmental forces within the system. When completing the survey, respondents categorized themselves based on a chart provided in the questionnaire that showed the category of each technical college in the system. Category 1 included "experienced" colleges that had already become regionally accredited before the system converted to "college" status in 2000. Category 2 included "less experienced colleges" and were those technical colleges that had become accredited since 2000 and those that had gained candidacy for accreditation at the time of this study. Category 3 included "inexperienced colleges" that had recently applied or who had not applied at the time of this study. At the time the study was conducted, these groups included 12 colleges in each of the first two groups (experienced and less experienced) and 9 colleges in the third group (inexperienced). A table of this categorization, which uses data from the January 2008 Commission on Colleges Southern Association of Colleges and Schools Member, Candidate and Applicant List, is shown (see Table 3.1):

Table 3.1

Categories of TCSG Accreditation Status (Experienced, Less Experienced, and Inexperienced)

Category 1:	Category 2:	Category 3:	
Dekalb Technical College (1967)	Albany Technical College (2005)	Altamaha Technical College (Applied)	
Athens Technical College (1988)	Atlanta Technical College (2005)	Lanier Technical College (Applied)	
Augusta Technical College (1988)	Coosa Valley Technical College (2006)	East Central Technical College (No application submitted)	
Chattahoochee Technical College (1988)	Middle Georgia Technical College (2005)	Flint River Technical College (No application submitted)	
Columbus Technical College (1990)	North Metro Technical College (2006)	Heart of Georgia Technical College (No application submitted)	
Gwinnett Technical College (1991)	Valdosta Technical College (2007)	Moultrie Technical College (No application submitted)	
Savannah Technical College (1991)	West Georgia Technical College (2007)	Ogeechee Technical College (No application submitted)	
Northwestern Technical College (1997)	Appalachian Technical College (Candidate)	Sandersville Technical College (No application submitted)	
Southwest Georgia Technical College (1997)	North Georgia Technical College (Candidate)	South Georgia Technical College (No application submitted)	
West Central Technical College (1998)	Okefenokee Technical College (Candidate)		
Griffin Technical College (1998)	Southeastern Technical College (Candidate)		
Central Georgia Technical College (1999)	Swainsboro Technical College (Candidate)		

and Year Applied for Membership or Application Status

Analyzing the third question required conducting a MANOVA where between-group effects were analyzed for teaching categories (required to teach and not required to teach). Similarly, analyzing the fourth question required conducting a MANOVA since there was more than one dependent variable. Management experience (management experience outside education and no management experience outside education) was used as the predictor variable, or independent variable.

Qualitative Data

Open-ended questions were added to the CAMEO Questionnaire after each of the questions that asked subjects to provide more details about the influence of each CAMEO model factor. By adding these open-ended questions, subjects were able to provide rich details about the influence to show if the influence was a positive or negative influence and any other information they wanted to share. The answers to these open-ended questions were analyzed by developing a code book in Excel that showed responses to each question coded as a positive influence (1) or a negative influence (2) and then showed emerging themes that the researcher detected as the data was analyzed. Each response for the open-ended questions was also coded so that the Excel spreadsheet could be filtered by the three different sets of groups analyzed in research questions 2 (COC Experience Level), 3 (teaching requirement), and 4 (management experience).

Responses to the open-ended questions were coded for salient themes from the overall group of 95 participants and were reviewed by two independent coders. The coders reviewed themes from the data and developed codes separately. Then they met to develop a codebook. During the second meeting, the coders discussed their chosen codes and decided on the major constructs. After the codebook was established, inter-coder reliability was conducted. Inter-coder reliability measures the consistency among coders and measures the degree to which coders can

assign the same code to the same text. The researcher and an independent qualitative researcher assessed the open-ended responses for this study. Inter-coder reliability was conceptualized as a percent agreement between the two coders. The coders reviewed and coded a percentage of the transcripts separately and met later to decide if they agreed. For this study, 10% of the responses were coded for reliability and 80% reliability was reached between the main researcher and the independent coder. After reliability was achieved, the researcher coded all remaining responses to open-ended questions.

Structural Coding Approach & Emergent Themes Approach—Codebook Development

To develop the codebook and analyze the responses to the open-ended questions, a combination of predetermined and emergent codes was used. First, the researcher established two predetermined codes that related to the influence of the CAMEO factors being studied (*positive influence* or *negative influence*). The next step was to create a list of "open codes" that emerged from the concepts discussed in the responses to the open-ended questions.

The open coding allowed for overarching themes to be determined from the predetermined codes sections. During this open coding process, the researcher made a list of codes based on the major concepts discussed by respondents. After the creation of this first list of open codes, additional responses were reviewed, the list of codes was modified, and connections were made between the codes. The main researcher reviewed the responses to develop the initial codes and then met with her major professor to review the codebook. After reviewing all responses for the *positive influence* and *negative influence* constructs, the list of open codes was modified and connections were made between the codes by developing additional categories and hierarchies of codes (Patton, 2005).

Internal validity can be problematic when applied to qualitative studies (Seale, 1999); however, strategies were employed in this study to ensure the quality of the research. For example, AMMs from different geographical areas and different sized institutions within the TCSG participated in the study, achieving within-method data triangulation (Denzin, 1978); data triangulation happens when instances of a phenomenon are observed in several different settings resulting in richer descriptions of the phenomena.

"One of the assumptions underlying qualitative research is that reality is holistic, multidimensional, and ever-changing; it is not a single, fixed, objective phenomenon waiting to be discovered, observed, and measured as in quantitative research" (Merriam, 2009, p. 213). By providing additional qualitative data in this study, the researcher attempted to better understand and report the mindset of AMMs within the TCSG than would have been possible with the quantitative data alone.

Assumptions

The researcher made the assumptions listed below about the design and methodology of this study:

- 1. Respondents will answer survey items truthfully and accurately.
- AMMs are the only people who can respond to questions about what influences their performance.
- 3. The data collected will provide an adequate basis for a study of the factors that influence performance of AMMs.

Limitations of the Study

Each of the technical colleges represented in the study has different numbers of AMMs and different organizational charts, cultures, and practices. Furthermore, the purpose of the study was to examine in general, not at each individual college, what influences AMM performance. As a result, the conclusions from this study can be generalized to only the population being studied, the AMMs in the Technical College System of Georgia. Principles of statistics prevent generalizing results to populations larger study samples when the samples may not be representative of the population. As a result, extending the results of the study to AMMs nationwide would be inappropriate.

Another limitation of the study is possible researcher bias. The researcher herself is an AMM in the TCSG and is required to teach as well as perform administrative tasks within her academic division. Her position is within a small technical college that has not applied for candidacy to seek regional accreditation through COC/SACS. The college has no official Dean of Academic Affairs, and she serves as a department chair over General Studies and Public Services, which includes supervising all general core instructors as well as the Cosmetology and Early Childhood Care and Education instructors/programs. The role of AMMs within the TCSG has been a primary interest of the researcher since she began to serve in this role, and the researcher wishes for more uniformity across the system. Her hope is that the results of this study will provide useful information to the state agency so that more uniformity can be established across the system for academic middle managers.

Delimitations of the Study

Analyzing the factors that influence performance of AMMs was delimited to the five CAMEO factors uncovered in the existing literature: climate, ability, motivation, environment, and opportunity to perform (Blumberg & Pringle, 1982; Cummings & Schwab, 1973; Hammons, 1982; Lawler, 1982). The study was delimited also by accepting the definitions of each factor in the CAMEO Model discussed in Chapter Two.

Summary

This chapter described the methodology used by the researcher to gather information from AMMs in the TCSG regarding the influence of CAMEO factors on their individual job performance. The population of the study consisted of all AMMs who had at least one year of experience as an AMM within the TCSG at the time the study was begun. A questionnaire developed by Dlabach (2005) was modified with the help of the researcher's committee and pilot-tested, and these modifications were explained. Information about the population of the study, data gathering, and analysis of data was also provided. Last, the researcher discussed assumptions, limitations, and delimitations of this study. In Chapter 4, a presentation of the results of the analysis described in Chapter 3 will be provided.

CHAPTER 4

QUANTITATIVE FINDINGS

The purpose of this study was to determine to what extent academic middle managers (AMMs) in the Technical College System of Georgia report that CAMEO model factors (climate, ability, motivation, environment, and opportunity to perform) influence the performance of their administrative duties. The research questions below guided the study:

- To what extent do climate, ability, motivation, environment, and opportunity to perform (CAMEO Model) affect the performance of academic middle managers as instructional administrators in the Technical College System of Georgia?
- 2. How does the technical college's regional accreditation experience level (experienced, less experienced, and inexperienced) mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 3. How does a teaching requirement for AMMs mediate the relationship between the CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 4. How does the management experience of academic middle managers mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?

The study's findings will be presented in two separate chapters. This chapter will include the quantitative information gathered through the CAMEO Questionnaire, originally developed by Gregory Dlabach (2005) for use in a similar study of the Illinois community college system and modified for use in this study. This chapter describes the statistical and qualitative methods used to analyze the data. The results of these analyses provided a means to respond to the research questions above.

First, the researcher screened the data and analyzed the descriptive statistics. Next, the researcher analyzed the rankings of the CAMEO means, which contributed to finding answers to the four research questions. Finally, repeated measures Analyses of Variance (ANOVA) was conducted to find if there were significant differences in the perceived importance of the CAMEO factors among AMMs and groups of AMMs.

Data Screening

Prior to the main analyses, the raw data file provided from SurveyMonkey was examined for accuracy of data entry. Since respondents entered their own data, data entry errors were less of a concern than if respondents had completed paper and pencil questionnaires and the researcher had later entered responses into a data file.

One of the assumptions that should be met when using repeated measures ANOVA is sphericity. A violation of sphericity can result in a loss of power and an invalid *F*-ratio, which would produce inaccurate results. In this study, sphericity was violated as determined by Mauchley's test, which tests whether the variances of the differences between conditions are equal. Since the assumption of sphericity was violated, the more conservative Greenhouse-Geisser estimate was used to correct violations of sphericity. All of the corrected *F*- ratios available in SPSS were the same as the F – ratio listed for sphericity assumed; therefore, the data's sphericity was sufficient to produce an accurate F – ratio.

Preliminary Analyses

This section reports the return rate and descriptive statistics along with the assessment of reliability of the instrument and its items (Creswell, 2002; Heppner & Heppner, 2004). Heppner & Heppner recommend examining dependent variables for differences across demographic groups. However, very little demographic information was collected and that which was collected was used in answering the four research questions, so this advice was not followed.

Reliability

Since Dlabach (2005) used the instrument in a previous study and produced an alpha coefficient of .73, the instrument was assumed to be reliable. However, upon analyzing the results in this study, the researcher discovered a low alpha coefficient between the pairs of questions for motivation and environment. The overall alpha coefficient for all eight questions across the five factors (climate, ability, motivation, environment, and opportunity to perform) was 0.69. However, as a result of low alpha coefficients for the pairs of questions dealing with motivation and environment, the mean scores for these two factors were kept separate instead of collapsing them into one overall mean score for each as Dlabach had done in his study. Since the alpha coefficient for the pair of questions dealing with climate was high, 0.87, the mean scores were collapsed for these two questions resulting in the following divisions of data: climate, ability, motivation2, environment1, environment2, and opportunity.

Return Rate

Of the 150 possible subjects in the target population, 95 usable responses were returned, which resulted in a 63% return rate. Although there could have been differences in the opinions between respondents and nonrespondents, experts in survey research agree that extreme differences are rare.

Descriptive Statistics

Descriptive statistics for the entire sample (N = 95) are presented below in Table 4.1. The first eight items on the questionnaire asked AMMs their perceptions of the influence of CAMEO factors on their work performance. A score of 1 indicated no influence, and a score of 7 indicated a strong influence. Each of these items were followed up with open-ended questions allowing respondents to comment whether the influence was positive or negative. These qualitative results will be discussed in Chapter 5.

The last six questions were demographic in nature. The first demographic question asked gender, and the data revealed that 40 percent of the respondents were male and 60 percent were female (See Appendix D). Next, the respondents were asked what their current position title was. Well over half of the respondents (63 %) carried the title of dean with minor variations to this title. Most AMMs in this group supervised credit instruction and some supervised adult education divisions. The next largest segment carried the title of director with 24 % of the responses. Again, most were supervisors over credit instruction with some supervisors of adult education divisions. Recently, the adult education division underwent a change so that supervisors over this division could choose to be titled a vice president, dean, or executive director. As expected, throughout the state, there is representation for all three of these titles. Department chairs made up 9 % of the responses, and vice presidents (5 %--2 recently promoted to vice president of academic affairs positions and three vice presidents over adult education divisions). One person was titled curriculum coordinator, and another was titled campus instructional coordinator. The next question asked how many years respondents had served in their present position. Sixty of the ninety-five respondents had served between one and five years with the majority (34) serving either one or two years. Twenty-five had served in their present

positions from six to ten years, and the remaining ten had served in their present positions over 10 years with no one having served more than twenty years. When asked if required to teach as part of their normal responsibilities, 20 % reported yes, and 80 % reported no. The average weekly contact hours required by those required to teach was 14 with a range from 3 hours to 30 hours (see Appendix G). The next demographic item asked for the total number of years of experience respondents had in various positions including their present position, rounding to the nearest whole year. An Appendix with this information is presented at the end of the study (see Appendix H). The next question asked respondents to categorize themselves based on COC accreditation status. Schools had been categorized and were listed on the survey so that respondents could easily find their category based on the college where they worked. In Category I (Experienced), which included the technical colleges that had gained COC accreditation before the conversion to "technical college" status in 2000, there were 31 respondents (32.6 %). In Category 2 (Less Experienced), which included the technical colleges that had gained COC accreditation after the conversion to "technical college" status in 2000 or who had recently become candidates for COC accreditation at the time of this study, there were 38 responses (40%). In Category 3 (Inexperienced), which included the technical colleges that had applied for candidacy or had not applied yet at the time of this study, there were 26 responses (27.4%).

The final item on the survey was an open-ended question probing to see if the respondents had any additional comments regarding the administrative role of AMMs within the TCSG. The results of this item are discussed in Chapter 5.

Research Question 1

The purpose of the first research question was to determine the extent to which academic middle managers report that factors related to the CAMEO model (climate, ability, motivation, environment, and opportunity to perform) influenced their performance. To examine research question 1, first a rank ordering of the CAMEO means was analyzed, and then a repeated measures ANOVA with no between-subject effects was conducted to see if any of the differences in mean scores were statistically significant.

Table 4.1 presents means, standard deviations, and rank for these items with the two climate items (institutional climate and work-unit climate) collapsed into one score. A score of 7 meant that the subject felt the factor had a strong influence on performance, whereas a score of 1 indicated no influence. It was interesting to note that the mean scores were similar and the rank ordering was the same for the CAMEO factors as in Dlabach's study (2005).

Table 4.1

CAMEO Factor	М	SD	Rank
Ability	6.12	1.16	1
Motivation1 (Satisfaction)	6.01	1.21	2
Climate (Institutional And Work-Unit)	5.27	1.59	3
Opportunity To Perform	5.25	1.42	4
Motivation2 (Perceived Fairness)	4.88	1.86	5
Environment1 (Work-Related External	4.78	1.61	6
Forces)			
Environment2 (Non Work-Related)	3.48	1.80	7

Means, Standard Deviations, and Ranking for CAMEO Factors

To determine if there were any significant within-subject effects, a repeated measures ANOVA was conducted on the data and found significant differences. As discussed in Chapter 3, one assumption of repeated measures ANOVA is sphericity. SPSS produces a test known as
Mauchly's test of sphericity, which tests the sphericity hypothesis that the variances of the differences between conditions are equal. Significant results on Maulchly's test indicated that the assumption of sphericity was violated; as a result, a correction was applied to produce a valid Fratio. Two widely used corrections available in SPSS were the Greenhouse-Geisser correction and the Huynh-Feldt correction. Both correction estimates were the same; therefore, it did not matter which estimate was used. Field (2009) states that the Greenhouse-Geisser estimate is the most conservative correction; therefore, the researcher chose it. The results of the ANOVA were significant F (5.24, 492.86) = 42.46, p < .001, suggesting that the level of perceived influence among the different factors within the CAMEO model for climate, ability, motivation1(satisfaction), motivation2 (perceived fairness), environment1 (work-related external forces), environment2 (non-work-related external forces), and opportunity to perform were significantly different (see Table 4.2), meaning that the various factors within the CAMEO model had varying levels of reported influence. For example, within each respondent's set of scores for influence of CAMEO factors, scores for the individual factors were significantly different. Dlabach's (2005) study showed that some of these factors were rated as more or less

Post hoc analyses consisting of twenty-one dependent sample *t*-tests were conducted to evaluate mean differences among variables (see Table 4.3), and these t-tests showed where the significant differences were within each subject's responses. For example, a respondent may have rated "ability" as a 7 but "opportunity to perform" as a 2. This would be interpreted as a significant difference indicating that the respondent perceived these two factors to provide significantly different levels of influence.

influential as others, and this was the case in this study as well.

The results of the post hoc analyses suggested that AMMs in the TCSG reported that environment2, which related to non-work-related external forces, had significantly less of an influence on their performance than environment1 (work-related external forces). Environment1 (work-related external forces) was perceived by AMMs to have had significantly less of an influence on their performance than all factors except motivation1 (satisfaction) and environment2 (non-work-related external forces). Motivation2 (perceived fairness) was perceived to have had significantly less of an influence than climate, ability, and motivation1 (satisfaction). Furthermore, climate was perceived by AMMs to have had a significantly less of an influence on performance than ability and motivation (satisfaction). Ability was perceived to have had a significantly greater influence on AMMs performance than all CAMEO factors except motivation1 (satisfaction), which was perceived to be statistically the same influence as ability. Likewise, AMMs perceived the following pairs as statistically equivalent as far as influence on performance: climate and opportunity, motivation2 (perceived fairness) and environment1 (work-related external forces), and motivation2 (perceived fairness) and opportunity.

In summary, AMMs in the TCSG perceived that ability and motivation1 (satisfaction), which had statistically equivalent mean scores, influenced performance more than any other CAMEO factors. In contrast, environment2 (non-work-related external forces) was perceived to be significantly less of an influence on AMM performance than any other CAMEO factors.

Table 4.2

Source	df	F	Sig.	Partial Eta ²	Power
Factor1 Error	5.24 492.86	42.46 (1.99)	.000	0.31	0.99

Repeated Measures ANOVA on CAMEO Factors

Note. Number in parenthesis presents the mean squared error.

Table 4.3

Dependent Sample t-tests among CAMEO Factors

	t	df	Sig.
Climate – Ability	-4.455	94	.000
Climate – Motivation1	-4.154	94	.000
Climate – Motivation2	2.057	94	.042
Climate – Environment1	2.600	94	.011
Climate – Environment2	8.694	94	.000
Climate – Opportunity	.118	94	.907
Ability – Motivation1	.784	94	.435
Ability – Motivation2	6.160	94	.000
Ability – Environment1	7.377	94	.000
Ability – Environment2	13.215	94	.000
Ability – Opportunity	5.106	94	.000
Motivation1- Motivation2	5.837	94	.000
Motivation1- Environment1	6.944	94	.000
Motivation1- Environment2	12.553	94	.000
Motivation1- Opportunity	5.097	94	.000
Motivation2- Environment1	.542	94	.589
Motivation2- Environment2	5.808	94	.000
Motivation2- Opportunity	-1.825	94	.071
Environment1- Environment2	5.808	94	.000
Environment1- Opportunity	-2.450	94	.016
Environment2 – Opportunity	-8.540	94	.000

Research Question 2

The second research question focused on whether the regional accreditation experience level (experienced, less experienced, and inexperienced) mediated the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia. Category 1 (experienced colleges that were already accredited when the system converted to technical college status) included 12 colleges. Category 2 (less experienced colleges that had become accredited by COC since the conversion to college status in 2000 or had become candidates) included 12 colleges, and Category 3 (inexperienced colleges that had only applied or had not applied for COC accreditation) included 9 colleges.

First, a ranking of the CAMEO factor means by COC experience level. Table 4.4 shows the ranking of the CAMEO factors by groups, the overall ranking, the mean scores, and standard deviations. The ranking of means showed some differences among the three groups. The experienced and less experienced groups ranked the factors in exactly the same order: ability, willingness/satisfaction (motivation1), opportunity, climate, perceived fairness (motivation2), work-related environment (environment1), and non work-related environment (environment2). However, the inexperienced group—those that have either applied or not applied for candidacy yet—ranked the CAMEO factors differently with motivation1, ability, and climate rounding out the top three respectively, and opportunity coming in sixth place (as opposed to third place for the other two groups).

Table 4.4

Means, Standard Deviations, and Ranking for CAMEO Factors by Group (Experienced vs. Less

	E	xperier	nced	Less Experienced		Inexperienced			Total			
	Μ	SD	Rank	Μ	SD	Rank	Μ	SD	Rank	Μ	SD	Rank
Climate	5.05	1.59	4	5.18	1.74	4	5.67	1.30	3	5.27	1.59	3
Ability	6.00	1.26	1	6.21	1.14	1	6.12	1.07	2	6.12	1.16	1
Motivation1	5.84	1.42	2	6.05	1.16	2	6.15	1.01	1	6.01	1.21	2
Motivation2	4.77	1.69	5	4.66	1.91	5	5.35	1.98	4	4.88	1.86	5
Environment1	4.61	1.50	6	4.58	1.60	6	5.27	1.71	5	4.78	1.61	6
Environment2	3.61	1.98	7	3.24	1.67	7	3.69	1.78	7	3.48	1.80	7
Opportunity	5.48	1.18	3	5.24	1.65	3	5.00	1.33	6	5.25	1.42	4

Experienced vs. Inexperienced).

Next, a MANOVA was conducted to assess if these differences were statistically significant. The MANOVA created a grand mean and assisted in controlling for Type I errors (or false positive results) by testing for differences on more than one dependent variable by an independent grouping variable (Coolican p. 495). A number of bivariate tests increase the risk of Type I errors; for this reason, multivariate comparisons were also conducted to assess the collective effect the independent variables/dependent variables (Stevens, 2002). The MANOVA uses the *F* test, "which is the ratio of two independent variance estimates of the same population variance," (Pagano, 1990, p. 329). The *F* test allowed the researcher to make the overall comparison on whether group means differed.

One of the assumptions of a MANOVA is homogeneity of variance-covariance, and Box's *M* test calculates this assumption; the results of the test was significant, *F* (56, 20310) = 1.37, p < .05, suggesting that the assumption was not met. The results of the MANOVA were not significant, *F* (14, 174) = 0.92, *p* = .542, suggesting that the differences among the three groups were not statistically significant. In other words, although the ranking showed that the inexperienced group's scores were ranked differently from the experience and less experienced groups' scores, these differences were not great enough between the grand means for each group to be statistically significant. Violating the assumption of homogeneity of variance-covariance did not present a problem as it would have if there had been significant differences detected. Since the result of the MANOVA was not significant, individual ANOVAs were then conducted to see if any significant differences existed in mean scores by factor, but no statistically significant differences were detected with the individual ANOVAs either. As a result, no post hoc analyses were conducted. The results of the individual ANOVAs are presented in Table 4.5. Table 4.5

ANOVAs on CAMEO Factors by Group (Experienced vs. Less Experienced vs. Inexperienced).

	F	Sig.	Eta	Power
Climate	1.20	.305	0.03	0.26
	(2.50)			
Ability	0.28	.758	0.01	0.09
	(1.36)			
Motivation1	0.52	.599	0.01	0.13
	(1.47)			
Motivation2	1.14	.325	0.02	0.25
	(3.46)			
Environment1	1.68	.191	0.04	0.35
	(2.56)			
Environment2	0.61	.546	0.01	0.15
	(3.26)			
Opportunity	0.82	.444	0.02	0.19
	(2.03)			

Research Question 3

The third research question sought to discover whether the requirement to teach as part of the normal responsibilities of the workday would influence AMMs' perceptions of how the CAMEO factors influenced their work experience. Of the 95 usable responses, 19 AMMs indicated that they had teaching requirements as part of their normal workload. First, the means of CAMEO factors were ranked by group. Table 4.6 shows the ranking of the CAMEO factors by groups, the overall ranking, the mean scores, and standard deviations. shows the ranking of CAMEO factors by groups as well as the overall ranking of the factors. The ranking of the mean scores by group showed differences between the two groups (see Table 4.6). Those required to teach ranked motivation1 (satisfaction) first (M = 6.42) and ability second (M = 6.00) whereas those not required to teach ranked ability first (M = 6.12) and motivation1 (satisfaction) as second (M = 5.91). Places three and four were also different between the two groups with those not required to teach scoring opportunity in third place versus those required to teach scoring climate in third place.

Table 4.6

Means, Standard Deviations, and Ranking for CAMEO Factors by Group (Required to Teach vs. Not Required to Teach).

	Required to Teach			Not Required			Total		
	Μ	SD	Rank	Μ	SD	Rank	Μ	SD	Rank
Climate	5.16	1.44	3	5.30	1.63	4	5.27	1.59	3
Ability	6.00	0.88	2	6.14	1.22	1	6.12	1.16	1
Motivation1	6.42	0.77	1	5.91	1.28	2	6.01	1.21	2
Motivation2	4.89	1.85	5	4.88	1.88	5	4.88	1.86	5
Environment1	4.47	1.35	6	4.86	1.67	6	4.78	1.61	6
Environment2	3.89	2.02	7	3.38	1.74	7	3.48	1.80	7
Opportunity	4.95	1.47	4	5.33	1.41	3	5.25	1.42	4
··· /									

Next, a MANOVA was conducted to assess if these differences between the two groups were statistically significant. As in the previous use of MANOVA, Box's *M* test was used to determine the assumption of homogeneity of variance-covariance. Because the results of the test were not significant, *F* (28, 3791) = 1.09, p = .341, the assumption was met. However, since no significant differences were detected with the MANOVA, *F* (7, 87) = 1.65, p = .133, violating the assumption of homogeneity of variance-covariance did not present a problem as it would have if there had been significant differences detected. As a follow-up to the MANOVA, individual ANOVAs were conducted to determine if any statistically significant group differences existed at the factor level as opposed to the grand mean level. Although the mean scores between the two groups approached significance for motivation1 (satisfaction) with p =.098, again, no statistically significant differences were detected between the scores of those required to teach and those not required to teach. The results of the individual ANOVAs are presented in Table 4.7.

Table 4.7

ANOVAs on CAMEO Factors by Group (Required to Teach vs. Not Required to Teach).

	F	Sig.	Eta	Power
Climate	0.13	.724	0.01	0.06
	(2.54)			
Ability	0.24	.628	0.01	0.08
	(1.35)			
Motivation1	2.80	.098	0.03	0.38
	(1.43)			
Motivation2	0.00	.978	0.01	0.05
	(3.50)			
Environment1	0.85	.359	0.01	0.15
	(2.60)			
Environment2	1.24	.268	0.01	0.20
	(3.22)			
Opportunity	1.10	.298	0.01	0.18
	(2.02)			

Research Question 4

The fourth research question sought to find if there were statistically significant differences between AMMs regarding administrative experience (those with administrative experience outside the field of education and AMMs with no administrative experience outside the field of education). First, a ranking of the CAMEO factor means was examined. Table 4.8 shows the ranking of the CAMEO factors by groups, the overall ranking, the mean scores, and standard deviations. Although the differences are not statistically different, there are differences in how the means were ranked between the two groups. Ability and motivation1 are the top two scores for both groups. However, the group with management experience ranked opportunity to perform third whereas the group with no management experience outside education ranked motivation2 (perceived fairness) third. Both groups ranked climate fourth, but the group with management experience outside education ranked motivation groups with no management experience outside education ranked environment1 (work-related external forces) fifth. The group with management experience outside education ranked environment1 (work-related external forces) sixth, but the group with no management experience outside education ranked environment1 (work-related external forces) in last place (see Table 4.8).

Table 4.8

Means, Standard Deviations, and Ranking for CAMEO Factors by Group (Management

Experience		No Experience			Total			
Μ	SD	Rank	Μ	SD	Rank	Μ	SD	Rank
5.39	1.42	4	5.00	1.92	4	5.27	1.59	3
6.19	1.05	1	5.93	1.39	1	6.12	1.16	1
6.09	1.07	2	5.82	1.49	2	6.01	1.21	2
4.81	1.88	5	5.07	1.82	3	4.88	1.86	5
4.70	1.65	6	4.96	1.53	5	4.78	1.61	6
3.55	1.79	7	3.32	1.83	7	3.48	1.80	7
5.42	1.23	3	4.86	1.76	6	5.25	1.42	4
	E: M 5.39 6.19 6.09 4.81 4.70 3.55 5.42	Experien M SD 5.39 1.42 6.19 1.05 6.09 1.07 4.81 1.88 4.70 1.65 3.55 1.79 5.42 1.23	Experience M SD Rank 5.39 1.42 4 6.19 1.05 1 6.09 1.07 2 4.81 1.88 5 4.70 1.65 6 3.55 1.79 7 5.42 1.23 3	Experience No M SD Rank M 5.39 1.42 4 5.00 6.19 1.05 1 5.93 6.09 1.07 2 5.82 4.81 1.88 5 5.07 4.70 1.65 6 4.96 3.55 1.79 7 3.32 5.42 1.23 3 4.86	Experience No Experience M SD Rank M SD 5.39 1.42 4 5.00 1.92 6.19 1.05 1 5.93 1.39 6.09 1.07 2 5.82 1.49 4.81 1.88 5 5.07 1.82 4.70 1.65 6 4.96 1.53 3.55 1.79 7 3.32 1.83 5.42 1.23 3 4.86 1.76	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Experience Outside Education vs. No Management Experience Outside Education).

Next, a MANOVA was conducted to assess if differences exist on the dependent variables of climate, ability, motivation1 (satisfaction), motivation2 (perceived fairness), environment1 (work-related external forces), environment2 (non-work-related external forces) and opportunity by group (management experience outside education vs. no management experience outside education). One of the assumptions of a MANOVA is homogeneity of variance-covariance, and Box's *M* test calculates this assumption; the result of the test was significant, *F* (28, 10016) = 1.49, *p* = .047, suggesting that the assumption was not met. The results of the MANOVA were not significant, *F* (7, 87) = 1.14, *p* = .349, suggesting no significant differences by group. Follow-up individual ANOVAs were conducted. Although the difference between the two groups' scores approached significant differences between the two groups. The results of the individual ANOVAs are presented in Table 4.9.

Table 4.9

ANOVAs on Individual CAMEO Factors by Group (Management Experience Outside Education

	F	Sig.	Eta	Power
Climate	1.19	.279	0.01	0.19
	(2.51)			
Ability	1.04	.310	0.01	0.17
	(1.34)			
Motivation1	0.97	.326	0.01	0.16
	(1.46)			
Motivation2	0.40	.529	0.00	0.10
	(3.49)			
Environment1	0.52	.472	0.01	0.11
	(2.61)			
Environment2	0.32	.571	0.00	0.09
	(3.26)			
Opportunity	3.14	.080	0.03	0.42
	(1.98)			

vs. No Management Experience Outside Education).

Summary

In closing, Chapter 4 presented the results of analyzing the quantitative data that the researcher collected in the CAMEO Questionnaire. This presentation of data included data screening methods followed by the results of the preliminary analyses, which included reliability analysis and descriptive statistics. Finally, the results from the statistical analyses were given divided by each research question. Although significant within-subjects effects were detected among mean scores for the CAMEO factor, when the data was analyzed for between-groups effects, no significant differences were detected. Chapter 6 includes more discussion of the results after first considering the qualitative data that is presented in Chapter 5.

CHAPTER 5

QUALITATIVE FINDINGS

The purpose of this study was to determine to what extent academic middle managers (AMMs) in the Technical College System of Georgia report that CAMEO Model factors (climate, ability, motivation, environment, and opportunity to perform) influence the performance of their administrative duties. This study was guided by the following research questions:

- To what extent do climate, ability, motivation, environment, and opportunity to perform (CAMEO Model) affect the performance of academic middle managers as instructional administrators in the Technical College System of Georgia?
- 2. How does the technical college's regional accreditation experience level (experienced, less experienced, and inexperienced) mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 3. How does a teaching requirement for AMMs mediate the relationship between the CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 4. How does the management experience of academic middle managers mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?

This study incorporated both quantitative and qualitative methods, and the findings are presented in two chapters. This chapter includes the qualitative information gathered through the open-ended questions in the CAMEO Questionnaire, using the qualitative methods discussed in Chapter 3. Each of the sets of responses for the nine open-ended questions were analyzed and coded for emerging themes. Two predetermined themes were part of the questionnaire and provide an opportunity for respondents to indicate whether the influence they felt was a positive influence or a negative influence. The original survey lacked a way for respondents to indicate whether the influence they rated was positive or negative; therefore, the researcher and her committee decided to ask in the open-ended questions for respondents to indicate if the influence was a positive or a negative influence, thereby strengthening the study. Within these two predetermined categories, the responses were analyzed and coded to determine the themes that emerged from the data.

Synthesis of Qualitative Results

A synthesis of the overall emerging themes will now be provided. A more thorough discussion will be provided in Chapter 6. Positive themes that emerged overall related to support (administrative support, family support, supportive staff, and support of faculty), teamwork (communication and responsibility), experience (work experience, education), motivation (self-motivation, satisfaction, and work ethic, and fairness), and individual ability (skills and health). Negative themes that emerged were lack of support including lack of administrative support (unfairness across divisions, lack of opportunity, ambiguous AMM role, overworked, and budget cuts), lack of support from faculty; lack of experience; graduate school obligations; change; and family obligations. Table 5.1 provides a list of these themes.

Table 5.1

Emergent Positive and Negative Themes from All Open-Ended Questions

Positive Themes	Negative Themes
Support Administrative Family Supportive Staff Support of Faculty 	 Lack of Support Lack of Support from Administration (unfairness across divisions, lack of opportunity to perform, ambiguous AMM role, overworked, budget cuts) Lack of Support from Faculty
 Experience Work Experience Educational Experience COC Accreditation Job Enlargement Competent AMMs 	Lack of Experience
Teamwork Communication Responsibility 	Graduate School Requirements
Motivation • Self Motivation • Satisfaction • Work Ethic • Fairness	Change
 Individual ability Skills Health 	Family Obligations

Results from Questionnaire Item 1: Institutional Climate

The first question on the CAMEO Questionnaire asked respondents how institutional climate influenced their performance as an AMM. Institutional climate was defined as the attitudes, feelings, and emotions that members of an organization hold towards the organization's culture. Climate includes views about such things as respect, flexibility, supportiveness, reward systems, opportunity for input, and cohesiveness within the institution. After ranking the level of

influence of institutional climate, respondents were asked to provide comments to describe if the influence was a positive or a negative influence on their performance as an AMM.

For the first question dealing with institutional climate, the responses were predominantly positive. The majority of responses indicated that institutional climate was a positive influence with *Support* emerging as a strong theme. As one respondent commented:

Opportunity for input and supportiveness are critical for an AMM. We have to be able to discuss our ideas for improvement of our programs, and we have to have input from others in the organization. Without that kind of support, all that happens is that we keep doing what we have always done. I have had that kind of support at my College. Recent mergers within the TCSG influence institutional climate dramatically, at least temporarily.

For the most part, AMMs within the system felt supported by their supervisors and by the state agency. Although AMMs indicated that they felt much pressure, they also indicated that that they were supported from the top. Another respondent echoed this sentiment in the following comment:

The institutional climate at my college is very positive due to the attitudes of upper administrative personnel. The [Vice President of Academic Affairs] is very approachable, pleasant and very respectful. I do not feel pressured, intimidated and he has proven to make decisions based on what is right for the institution, rather than what everyone (the good ole boys) would expect him to do. For that, I am very impressed.

Response after response echoed the notion that most AMMs felt supported in their positions. Even though the position demanded much from these middle managers, they felt that they were able to do their jobs from the support received from their direct supervisors.

Another positive theme was *Teamwork*. One AMM stated, "The institutional climate is among the strongest necessary consideration for almost every task in this position. It has been a strong positive influence to develop the teamwork (family) type of interdependence to get most jobs accomplished." AMMs who expressed teamwork as an important factor were more positive about the influence received by institutional climate.

Work Ethic also emerged as a positive theme regarding institutional climate. An AMM commented as follows about work ethic: "….In short, I'm not one led by baubles or pats on the back. My work ethic is reflective of my personal pride and self-respect." The others who made comments about work ethic reinforced this same concept that their personal work ethic controlled their outlook about their job and that institutional climate, good or bad, did not affect their performance. When the institutional climate was negative, these AMMs strong work ethic took over and kept them on track.

On the other hand, roughly a third of the AMMs felt that institutional climate was a negative influence. The most common theme among the negative influence group was *Lack of Support*. An example of the frustration experienced by some AMMs can be seen in the comment from one AMM below:

Under the current administration we do not receive the support that we have experienced with previous administrations. This has caused an erosion of cohesiveness with our instructional unit, because a few are having to carry the load for others who do not perform their job duties. In education it isn't a matter of "letting it go," because we are here to serve the students. If one person doesn't do their job, others must pick up the slack or students don't get registered for classes, instructors don't receive feedback on their syllabi, and other duties suffer because the person responsible for performing those duties

is busy doing someone else's job. I perform my job to the best of my ability and take on the extra responsibilities because that is just the way I am. I get no encouragement or thanks for going the extra mile--only more work passed my way.

Some respondents felt they had been supported in the past but were not currently supported. These AMMs felt little power to make decisions but the pressure to take responsibility for their divisions if problems arose. The climate for these was expressed as "very cold." Support, therefore, was viewed as fluid and most times was based on perceptions of upper management's involvement with and support of their divisions. AMMs must adapt to the changing levels of support in order to work effectively in their roles.

Results from Questionnaire Item 2: Work-Unit Climate

The second open-ended question asked respondents to comment further on work-unit climate. Work-unit climate is similar to institutional climate with one major difference—it pertains to work unit (e.g. the academic department that is supervised). This perspective on climate still includes views about such things as respect, trust, flexibility, supportiveness, reward systems, opportunity for input, and cohesiveness, but within the work unit, rather than the institution as a whole.

Like the responses on institutional climate, the responses on work-unit climate were overwhelmingly positive. *Teamwork* was the most predominant theme in the responses indicating a positive influence. For example, one person commented, "The work-unit climate is very positive as well. Everyone gets along and works well together as a team. It is a joy to work in an environment such as this."

Another strongly emerging positive theme was *Support of Faculty*. Most of the AMMs who responded felt that they supported the faculty members in their divisions very well. An example from one respondent follows:

My work-unit climate is something that I feel I have more influence over than the organizational climate at large. I work very hard to create an environment of trust and respect. I believe that my role as a Dean is to support my faculty and to assure that they have everything they need (resources/etc) to do their jobs. Also, I feel that I work well with my supervisor (sometimes having to "manage my boss"), and that makes for a win-win for everyone. The absolute key to creating this environment is effective communication -- not avoiding conflict --- but being willing to work through the difficulties striving to achieve the same goals....

AMMs realize it is up to them to create a positive climate for faculty. Being in the middle, AMMs can empathize with faculty members while also seeing issues from an administrative point of view. AMMs in the system routinely work out "win-win" solutions so that both faculty and administration will be happy. This problem-solving requirement faced by AMMs daily, is facilitated by flexibility, a trait that many AMMs mentioned in their responses. The following comment was a perfect example of how supporting faculty through flexibility can promote a positive climate for faculty:

Flexibility in scheduling [faculty work hours] is something I push, as there is little other of motivational value that I can offer [to faculty]. One of these days I am going to get written up for it, but I am willing to take that admonition when it comes. I intend to continue to pursue a model of servant leadership, though it puts me in diametrical opposition to the administrative culture. But after all, I must do my job, and my job (as I

see it) is to produce outstanding students, which requires the development of outstanding faculty.

On the other hand, some AMMs felt work-unit climate to be a negative influence. The strongest emerging theme in this category was *Lack of Support from Faculty*. In some cases AMMs felt that they could not constructively criticize faculty within their divisions without facing negative consequences. Providing honest performance evaluations was viewed as a big challenge:

One member of my faculty got a less than favorable review from me at the end of FY 08. She convinced the others to meet with my supervisor and air complaints. Now, I'm buried in paperwork in an effort to make sure I document every exchange I have with any teacher. I fully intend to cover myself.

As one can see, this type of situation could be stressful to an AMM who is trying to improve an instructional division. When faculty members are not supportive of constructive criticism offered to improve instruction, an AMM's job becomes extremely difficult. Some AMMs felt much stress over situations like this and indicated that the influence was highly negative, while others stated that faculty should "get on board" with the program or perhaps find employment elsewhere. Personality differences among AMMs probably affect how this type of situation is dealt with to a large degree.

Although few comments were made regarding the next theme, another emerging theme in the negative influence group was *Lack of Administrative Support*, with one person stating, "A year ago, I would have said the influence was positive. We have had to deal with sharp budget cuts, and some of the decisions I have had to make have not been received well. I feel that I am not getting support from above..." Another AMM commented, "The lack of a clear hierarchy

among peer positions often creates confusion and duplication of work (which then impedes trust and cohesiveness)." This statement supports the ambiguousness of the position experienced by most AMMs in fulfilling their roles within their respective colleges. If the position were more standardized at the state level, much of the confusion and duplication that individual colleges experience when placing AMMs within the administrative hierarchy would be resolved.

Results from Questionnaire Item 3: Ability

The third open-ended question asked respondents to describe if ability was a positive or negative influence. The definition of ability included what a person can do. It included the characteristics of individuals which affect his/her current capacity to perform the administrative responsibilities of an academic middle manager. These characteristics include level of educational attainment and relevant educational experiences, years of relevant administrative experience, age, health, and endurance. In this area, almost all of the responses indicated a positive influence, leading the researcher to believe this was because the respondents were discussing their own abilities, which would probably be perceived as positive anyway by most people.

In the group representing a positive influence, *Work Experience* was the leading theme. *Educational Experience* was also a strong theme, and many respondents combined these two themes in their answers. One AMM effectively summarized the situation like this:

This influence is very positive.... What I do on a regular day today would have driven me from this position 15 years ago. The experience plus the additional education has given wisdom and insight to deal with situations that come every day. When I had less experience and education but youth and strength I tried to force situations that now I

think and reason my way through. Experience and education does more than get you through the day.

Likewise, another AMM had the following to say regarding work experience and education:

My ability to perform is enhanced by my years of experience as an instructor as well as my educational background. I strive to be the supervisor that I wanted as an instructor. As a supervisor, I have the capabilities of shaping an instructor into someone beautiful or I can crush their spirits and cause their morale to be low. I consider myself to be a healthy individual and young enough to be able to perform the administrative responsibilities delegated to me.

Individual ability was also a strong theme. AMMs felt that they possessed the necessary ability to perform their jobs satisfactorily. This individual ability included skills but also referred to having good health, which allowed them to be able physically to perform job duties satisfactorily. Some mentioned that they had had some health issues that made them realize how important good health is to being able to perform on the job.

On the other hand, a few respondents felt that ability was a negative influence. Since most people have a positive perception of their own abilities, the responses tended to be overwhelmingly positive overall. The few that indicated the influence to be negative focused on *Lack of Experience* and *Overworked*. Regarding lack of experience, one respondent stated, "I came in with no knowledge of this job. Even though my skills were most relevant, my job knowledge was not. Luckily, I did not make too many major mistakes." Another AMM over the adult education division commented, "In the beginning, my lack of experience in adult education had a somewhat negative impact on my program. I had the education and administrative

experience, but adult education was very new to me....This did affect decision-making....." If the truth be told, most AMMs can probably identify with these individuals since the TCSG has no formal training to prepare individuals for the AMM role. Although no program can fully prepare individuals for an AMM role, nationwide, preparation of educators for the AMM role within a college is a shortcoming that has been recognized through research and should be addressed in more colleges.

The second negative theme that emerged was *Overworked*. As one put it, "I have a strong work ethic & can multitask without much difficulty. There are times when the demand for my time outweighs my actual ability to keep up...." This theme emerged in more than one question set. AMMs in the TCSG feel overworked, and this is a negative influence recognized by many AMMs in this study.

Results from Questionnaire Item 4: Motivation1 (Satisfaction)

The fourth item on the CAMEO Questionnaire asked AMMs about motivation as it regarded their willingness to use their ability. Motivation is defined as the willingness to use ability in the performance of the administrative responsibilities of an academic middle manager. It can be quantified through feelings of satisfaction. Feelings of satisfaction with certain workplace factors have shown to influence motivation. These factors include such things as the clarity of role, the pace of work, the workload, control of the work environment, the variety of work experiences encountered, achievement in those experiences (results), the manner in which achievements are recognized, the orientation and development for the position, the level of competition among peers, the opportunities given to contribute to or improve the unit or institution, and the congruence between effort and the institution's goals and priorities.

The positive themes that emerged were *Self Motivation, Satisfaction, Teamwork, and Responsibility. Self Motivation* emerged as the most prominent positive theme. As one AMM put it, "I have always been self-motivated. I don't need a lot of recognition and motivation to perform my job." This concept was repeated throughout the responses. Most AMMs felt that they motivated themselves and that external motivators such as those listed above did not matter that much to them. External motivational factors may have had more impact than AMMs realized, especially since the theme *Overworked* did emerge more than once throughout the question sets. Another theme that emerged in the positive category was *Satisfaction*. A revealing comment about satisfaction is shown below:

As a middle manager, I have never thought, "How can I use motivation on any given faculty member today." The need for and use of motivation is instead an outgrowth of understanding the nature of the job that needs doing or the problem that needs solving and my desire to determine and follow through on how best to get the desired results ethically and within the parameters of what kinds of motivation can be offered. Satisfaction comes from this problem-solving activity with my faculty.

A third positive theme that emerged was *Teamwork*. AMMs who reported that teamwork was important recognized that teamwork was essential to motivate faculty within their division and that teamwork with peers and supervisors was also critical in order to stay motivated in the role of AMM. Finally, *Responsibility* emerged as a positive theme. Those who focused on this area indicated that they were motivated by the responsibility their position held. In other words, the AMM was responsible for many areas such as enrollment management, marketing, strategic planning, and other areas that could make a positive difference within the college.

In contrast, *Lack of Administrative Support* and *Overworked*, and *Change* emerged as negative themes. How some felt about lack of administrative support can be illustrated through the comment below:

....It is in my nature to work toward excellence, and I fight any feelings I have to allow the culture change that. Having said that, the biggest temptation I have to allow my culture affect my motivation comes from (a) a lack of clarity in administrative objectives, (b) the fact that the opportunities I have to contribute are often accompanied with criticism and lack of appreciation, and (c) the fact that my main passion is student development and the administration's goals seem to be community/political development....My motivation comes from within. That doesn't mean it isn't sometimes difficult.

Although most do feel supported, it is important that supervisors of AMMs recognize the struggles that AMMs routinely face when placed "in the middle" of developing students and managing the faculty within a college. As already indicated, many AMMs feel overworked and are frustrated that they cannot perform all duties as well as they like due to their workload. A telling response on the *Overworked* theme is shown below:

I am internally motivated...I don't need praise, etc. from superiors. My present frustration is with the required workload. I want to perform exceptionally in every task that is required of me. However, when tasks become too numerous and overwhelming I struggle internally and become stressed. Do I accomplish some of the tasks to my expectations or do I inadequately perform all the tasks - this is my internal battle!

AMMs have a heavy work load and much responsibility. Another response echoes this sentiment: "Generally my motivation is good. When I do feel very unmotivated is when my work

load is so heavy that I become frustrated and want to give up. Sometimes I put out fires all day and never get the things done that I need to do...." Finally *Change* emerged as a theme. As is often the case, change requires individuals to become uncomfortable. The changing economic climate has hurt division budgets and has required AMMs to be more careful with division budgets. Furthermore, the TCSG has been undergoing some significant unpopular changes such as college mergers and the process of regional accreditation that have caused a lack of motivation across entire colleges in the TCSG.

In summary, a large majority of AMMs felt that motivation came from within and that this was a positive influence for them in their work. This supports Hammons (1982), who was the original developer of the CAMEO model and who viewed motivation as internal pressure that made people willing to use their abilities. However, the comments regarding lack of administrative support and being overworked should be addressed. Again, the researcher believes that the comments may be more positive because respondents are commenting on how motivational factors influence their own individual performance, and most would perceive their performance to be positive.

Results from Questionnaire Item 5: Motivation2 (Perceived Fairness)

The fifth question dealt with motivation as it related to perceptions of fairness. This relates to perceptions of treatment regarding the application of personnel policies, practices, and procedures (attendance policies, for example), to how tasks and responsibilities are distributed, to how work is evaluated and compared to the work of others, and to how recognition is distributed. The qualitative data revealed a relatively balanced outcome of positive and negative outcomes.

In the responses indicating a positive influence, *Fairness* emerged as a strong theme. Many AMMs felt that they were receiving fair treatment and were giving fair treatment to those they supervised. Many commented that they follow standards and expect those that supervise them to follow standards to provide fair treatment across divisions of the college. A typical comment regarding fairness follows:

I have at most times considered that I was treated much better than deserved and only on a rare occasion considered that I was less than fairly treated. Whether I perceived my own treatment as fair or unfair, my endeavor would be to treat and evaluate employees' performance, responsibility and task assignments, not based on the fairness of how I am being treated, but instead based on expected standards of performance.

Another positive theme that emerged was *Self Motivation*, which was a common theme across all of the questions. One AMM expressed the sentiment as follows:

I have discovered that life is not fair. I have not been mistreated and I do not mistreat those that I supervise. I believe in following the polices, guidelines, rules and regulations and I expect those that I supervise to do the same. I think that in my years as an administrator that I have been treated justly and fair. My motivation comes from within and my desire to be the best academic dean in the system.

Although many responses indicated that AMMs perception of fairness was positive, almost as many felt the influence was a negative one. *Unfairness across Divisions* emerged as the predominant negative theme. This perception is a problem within the TCSG and should be addressed. One gave the following comment regarding unfairness:

...I have a very low expectation of "fairness", and perhaps that is simply because of my world view. I don't expect it, and am not disappointed when I don't receive it. I don't

work for accolades or promotions — I work for students....The only time "unfairness" bothers me is when I see my division treated unfairly compared to other academic areas, and that happens all the time....

When AMMs perceive unfairness, this perception is more than likely passed on to the ones they supervise, which lowers morale overall. Since so many of the responses did indicate unfairness across divisions, the agency should look into this area to see if resources can be more equitably allocated.

Once again, *Overworked* emerged as a negative theme. One AMM plainly stated, "This has been a negative influence because my academic work load is too great as compared to the administrative duties I have been assigned." Another asserted a finding in previous research stating, "The division of work is problematic---many of those in positions at this level are not thoroughly prepared for the responsibility." The comments regarding overwork of AMMs does support previous research of AMMs. Work load of AMMs is an issue that the TCSG should take seriously. Research has shown that many people in the AMM position stay there only a few years because of the tendency for burnout.

Results from Questionnaire Item 6: Work-Related Environment

The sixth question dealt with work-related environment. Work-related environmental factors are those external forces which may influence any aspect of performance. Forces from the work-related environment include pressure from students, faculty, and local governing boards. Other forces originate with state legislatures, state coordinating boards, trade and industrial organizations, congress, government agencies, vendors, technology, and regional and specialized accrediting bodies.

On the positive side, *Responsibility* emerged as a theme with the following comment serving as a good representative quote: "...Obviously, I don't create external factors, and, most of the time, I can't alter them, but I can try to understand them and do my best to work within their constraints. Actually, I've found that external forces often have positive value...."

Another positive theme that emerged was *Support*. "As stated before, I have a very supportive administration and the local community of interest is very helpful....This has been a positive influence on my performance, one person responded. Those that spoke about support indicated that they experienced good support from the local community and from the state. Interestingly, *COC* was a theme that emerged as well and was a positive influence. Those who commented about COC indicated that the regional accreditation process forced them to evaluate their programs and resulted in a better program and a better college overall.

More responses were classified as a negative influence, however. The negative themes were *Budget Cuts*, *Overworked*, and *Lack of Support*. A telling quote dealing with both budget cuts and being overworked is listed below:

The number of hours and the need to reach students takes up a considerable amount of my time....Also, because of the nature of the programs in my department, much of my time is also spent dealing with state regulations, licensing boards, etc. Budgetary constraints increase the work and the difficulty in doing my administrative duties. "Do more with less" is a great concept but it really loses something in the translation to real life.

Another AMM said this:

....Sometimes there are just more things to do than you can possibly do within the time constraints that you have and you feel frustrated that you can't do a good job at any of

them. Sometimes there are just not resources available to allow you to do what you really need to do to perform your duties at an acceptable level which leads to frustration. But — a good administrator would/should be able to be inventive and figure out ways to get the really important things done.

Lack of Support also emerged as a negative theme. As one AMM responded: "Those who make decision about my job duties, performance, and funding sometimes do not know what the job entails. There are times that frustration can set in because of lack of support and funding to do the work." Another noted, "In the past couple years these outside influences have become more noted in TCSG. Leadership from the top is at an all time low and politics is out of control. These factors truly make it difficult to stay focused." Another AMM said, "…..The public higher education environment continues to be increasingly more challenging: reduced funding, increased accountability, lack of political support, debilitating policy. I regard these as normal challenges in the field and look for creative ways to surmount these challenges." Finally,

In summary, work-related environmental factors have had more of a negative impact on AMMs overall. Although some responded with information related to accountability and support on the positive side, AMMs felt overworked and stressed over budget constraints. Furthermore, a lack of administrative support was a concern regarding work-related environmental factors.

Questionnaire Item 7: Non-Work-Related Environment

The seventh question on the CAMEO Questionnaire dealt with non-work related environment. Non Work-related Environmental Factors are any non-work related forces that influence performance. Forces outside the work environment can come from such sources as family obligations, personal finances, and other personal obligations such as the commitment to acquire advanced degrees. The responses to the open-ended question revealed that the influence in this area was relatively balanced between positive and negative influences.

The most common positive theme that emerged was *No Personal Barriers*. In other words, most perceived that personal issues did not interfere with work performance. As one person said, "Though I rate my personal factors as very good I still try to keep work and personal influences separate. As a general rule I think both are in very nice balance both now and in the past." Another positive theme that emerged is *Family Support*. One person responded, "Non Work-Related factors have possibly one of the strongest positive influences on my performance as an academic middle manager. My family have supported physically, emotionally, and fiscally my desire to earn my two advanced degrees...."

Family Obligations emerged as an important negative influence on performance and was the most common response. For example, one AMM expressed frustration this way: "There are times that tasks are left undone because of family obligations. This is not bad but it does cause conflict within me to decide between family and completing a task." Some expressed both positive and negative influences in this category, such as the following remark:

Stress related to family obligations has had a negative impact on my job performance — particularly caring for aging parents, etc. However, I have been privileged to feel much support from supervisors and from peers who are willing to assist me when needed, just as I have assisted others — It's a give and take game and my peers and I work well together....

The theme of *Graduate School Requirements* was another negative influence on performance. This theme is addressed in the quote below:

Obligations such as attending school for advanced degrees sometimes creates a time competition between work and school. As an administrator, my work responsibilities quite frequently extend beyond the normal work hours. Prior to entering school, I frequently spent time beyond the normal work day completing work assignments and resolving issues with students.

Finally, *Overworked* again emerged in this area with one AMM commenting: "I have reduced the amount of non-work related activities that I participate in because of the increased demand from my job...."

In closing non-work related environmental factors have had an equally positive and negative influence on AMMs based on the responses received. On the positive side were family support and no interference from personal issues. On the negative side were family obligations, graduate school obligations, and a perception of being overworked.

Results from Question 8: Opportunity to Perform

The eighth question asked AMMs about their opportunity to perform. Opportunity to perform is the chance given to perform and receive feedback from a supervisor and the institution. Supervisory actions shown to influence performance include delegation, participation, job enlargement (new responsibility/authority), goal setting, resource (human, fiscal, technical, and information) allocation, performance appraisal, and the time to complete tasks. Institutional actions such as organizational policies, rules, practices, and procedures also influence performance.

The majority of the responses were positive with the most common theme being *Administrative Support*. Most AMMs feel supported by their immediate supervisors. An AMM had the following to say:

My job has almost totally been made up of opportunity to perform. My college has given me resources and encouragement to perform at peak level. Opportunity to perform

provides the chance to grow your position and make the college be the best of the best. Another positive emergent theme was *Job Enlargement*. Most AMMs felt that they were able to grow in their positions, as expressed below:

Opportunities for career growth have had an abundantly positive influence. Having entered the work force later in life, it has been surprising to have had the opportunities of 3 major enlargements; and, when the last enlargement grew disproportionately in comparison with other divisions because of increased enrollment, I had the opportunity of receiving a requested job split. Considering the allocation of funds and personnel, performance appraisals, I have been most often affirmed. With the exception of occasionally one of five supervisors, ample time to complete tasks has generally been granted. Concerning organizational policies, rules, practices, and procedures, are interesting challenges to learn to work within the system usually bringing positive results.

On the other hand, a negative theme that emerged was *Lack of Opportunity* with one commenting, "…Overall, the environment is oppressive. The leadership is autocratic. One might have the ability to perform but one has to be allowed to demonstrate the ability for good results. There is not much room for opportunity under this type of leadership except to do what one is told to do." *Budget Cuts* emerged again in this section with one commenting, "Years of budget cuts have been frustrating and limiting." Finally, the theme of feeling *Overworked* emerged once again as a negative theme. One AMM expressed resentment this way including thoughts about both lack of opportunity and being overworked:

...In my position, I (generally) do not have a great deal of direct supervision. It requires being a self-starter, and that is what the expectations are. If you can't perform, the administration will simply find someone else to take your place. I actually like that kind of mode (I despise being micromanaged), but I have found one flaw in an environment such as this. The objectives are tossed out there, but they are often vague, inconsistent, and — in some cases — unachievable....

Another AMM stated, "This has been a negative influence because my academic work load is too great. Therefore I do not have time to perform my administrative responsibilities to the best of my ability."

In summary, although AMMs do feel supported and feel that they are given opportunity to grow for the most part, many also feel they have not been given adequate opportunity, and budget cuts and being overworked have weighed heavily on them.

Results from Final Question: Additional Comments

At the end of the CAMEO Questionnaire, respondents were given the opportunity to make any additional comments that they wanted. On the positive side, *Competence of* AMMs emerged as a theme. Someone commented on the importance of the AMM position in the following way:

The middle managers in the Technical College System are the "doers"; they get things done and make sure that day to day functions go on regardless of what may be happening on the state level. The middle managers are concerned about what is in the best interest of the students.

Another positive theme that emerged was *Communication*. As one subject stated, "Good managers learn to apply the Golden Rule --- up and down the chain of command ---

communicate --- communicate --- communicate!!!! Finally, a third positive theme was *Satisfaction*. One commented, "When used effectively, we can drive the boat. I've enjoyed my role as department chair and look forward to continuing to serve the state in any capacity." Another summed up the idea with the following remark: "These are very rewarding though challenging jobs. We need more folks ready to step into these roles." Another simply stated, "Fortunate to be selected and enjoy the work." It seems that overall, most do enjoy the role they fill and consider it a challenge.

In contrast, a couple of negative themes emerged in this final set of responses. Many again voiced that they felt *Overworked*. Remarked one person, "My role requires too much of one individual with the burden of both teaching and full time administration." Others left comments such as "Very busy" or "Never a dull moment" or "It's a tough job, but someone has to do it." Another negative theme to emerge was *Ambiguous AMM Role*. One AMM commented: "I have the perception that there is a wide array of differences in the duties/responsibilities among those around the state at this level—that array impedes many of the cooperative activities that could be taking place." The following quote most completely paints a picture of the AMM role and is strikingly similar to a quote from Seagren et al (1994) that portrays the AMM as "...a juggler who initiates, controls, and halts objects being juggled":

This position is a balancing act between understanding day to day operational details and strategic visions; between management and leadership; and between being responsive to the faculty and also to the administrative leadership. At a system and often at a college level, middle managers are given a great deal of responsibility with little decision making power. We also have one of the weakest support (peer) groups in the system. That said, it's challenging and exciting to be stuck in the middle.

Summary

In summary, this chapter gave results from the qualitative data that was shared by respondents through nine open-ended questions on the CAMEO Questionnaire. The answers the respondents gave provided a glimpse of the thoughts of AMMs throughout the state regarding the factors that make up the CAMEO model. Frustrations and victories were verbalized in these responses, and a wealth of information was revealed. It is evident that the role of AMM is an important one in the minds of those who fill this role throughout the state.

CHAPTER 6

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study examined the extent to which academic middle managers (AMMs) in the Technical College System of Georgia report that CAMEO Model factors (climate, ability, motivation, environment, and opportunity to perform) influence the performance of their administrative duties. The research questions below guided the study:

- To what extent do climate, ability, motivation, environment, and opportunity to perform (CAMEO Model) affect the performance of academic middle managers as instructional administrators in the Technical College System of Georgia?
- 2. How does the technical college's regional accreditation experience level (experienced, less experienced, and inexperienced) mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 3. How does a requirement to teach mediate the relationship between the CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
- 4. How does the management experience of academic middle managers mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?
Additional Limitations of the Study

During the course of the study, the researcher realized some additional limitations not recognized at the outset. First, unlike the original study by Dlabach (2005), after collecting the data, means for motivation1(satisfaction) and motivation2 (perceived fairness) and means for environment1 (work-related external forces) and environment2 (non-work-related external forces) could not be collapsed into one overall mean for each factor because the overall mean scores for each pair were not strongly enough related to one another. The mean scores for the pair of climate questions (institutional climate and work-unit climate) were strongly enough related and were able to be collapsed into one overall mean score for climate, as was done in Dlabach's (2005) study. However, since the other two pairs for motivation and environment were not collapsed into one overall mean score for each, the quantitative analysis became more complicated since more factors were taken into consideration and the number of factors increased from five to seven, resulting in 21 different pairs of factors for the comparisons in the repeated measures ANOVA where within-subject effects were tested.

It also became evident that the questions for each CAMEO factor could have been further improved. The questionnaire would have probably revealed more if multiple questions had been developed for each of the eight CAMEO factors: one question for each element of the definition of each factor. For example, the question for ability included several different elements of ability such as level of educational attainment, relevant educational experiences, years of administrative experience, age, health, and endurance. The questionnaire item for ability asked respondents to rank to what extent ability, as defined, influenced past performance of administrative responsibilities as an AMM. A respondent may have experienced a weak influence from health and endurance but a strong influence from administrative experience and/or educational

experience. Furthermore, influence from some elements may have been positive whereas influence from other elements may have been negative. As a result, the quantitative responses to the survey did not reveal as much as they could have because of the numerous elements of each factor that were lumped together in one item. This problem was found in each of the eight questions on the CAMEO factors. In the qualitative responses to open-ended questions, numerous respondents commented that some elements were more or less influential than others that were grouped together in the item, and one respondent even commented that the questionnaire was cumbersome to complete. In any event, significant differences between groups analyzed may have been detected more easily if the questionnaire had been further revised to include more items for each factor.

Summary of Findings from Combined Quantitative and Qualitative Data

This section presents findings for each research question after merging the quantitative and qualitative data collected. Dlabach's (2005) study did not provide an opportunity for respondents to indicate if the influence they ranked for each CAMEO factor was positive or negative; therefore, one of the strengths of this study was the qualitative component that allowed respondents to provide rich data on the positive or negative influence of CAMEO factors. The findings are organized around the four research questions used in this study:

Research Question 1:

To what extent do climate, ability, motivation, environment, and opportunity to perform (CAMEO Model) affect the performance of academic middle managers as instructional administrators in the Technical College System of Georgia?

To respond to research question 1, first mean scores for the factors in the CAMEO model for all respondents (N = 95) were ranked as shown in the table below:

Table 6.1

	Μ	SD	Rank
Ability	6.12	1.16	1
Motivation1 (Satisfaction)	6.01	1.21	2
Climate (Institutional and Work-Unit)	5.27	1.59	3
Opportunity to Perform	5.25	1.42	4
Motivation2 (Perceived Fairness)	4.88	1.86	5
Environment1 (work-related external forces)	4.78	1.61	6
Environment2 (Non Work-Related)	3.48	1.80	7

Means, Standard Deviations, and Ranking for CAMEO Factors

Ability was the highest rated factor of the CAMEO Model followed by motivation1 (satisfaction), climate, opportunity to perform, motivation2 (perceived fairness), environment1 (work-related external forces), and environment2 (non work-related). Interestingly, the mean scores were strikingly similar to those in Dlabach's 2005 study (see Table 6.2). The repeated measures ANOVA showed several statistically significant within-subject effects, showing that different factors were reported to have statistically different levels of influence within each subject. Ability and motivation1 emerged as the strongest reported influencers, supporting models such as Vroom's (1964) seminal work on motivation theory that established ability and motivation as key predictors of job performance. Environmental factors (work-related and non-work-related) were shown to be statistically less influential on job performance.

Table 6.2

Item	М	SD
Institutional climate	5.70	1.28
Work Unit climate	5.77	1.20
Ability	6.13	1.02
Motivation (satisfaction perspective)	6.13	.98
Motivation (equity perspective)	5.31	1.30
Work-Related Environment	4.93	1.39
Non- Work Related Environment	3.83	1.52
Opportunity to Perform	5.54	1.13
(Dlabach, p. 96, 2005)		

Dlabach's (2005) Means and Standard Deviations for CAMEO Factors by Item (N = 150)

The qualitative findings were interpreted from 395 coded responses to nine open-ended questions. An open-ended question followed each of the eight Likert-scale questions on the eight CAMEO factors, and an additional open-ended question provided respondents the opportunity to share any additional information regarding the AMM role. Overall, a total of 67 percent (265 responses) indicated the CAMEO factors had provided a positive influence and 33 percent (130 responses) indicated these factors provided a negative influence on performance.

The literature suggested that the CAMEO factors would be important to AMMs, and the study validated the factors as influential to the AMMs in the TCSG since all factors except for the non-work-related environment factor received a mean score that indicated at least a moderate influence. If the two mean scores for environment are averaged, the overall mean for environment is 4.13, which shows that, overall, environment has a moderate influence on performance. However, non work-related environment by itself is slightly less than moderate with a mean of only 3.48.

The quantitative findings showed that AMMs felt ability and motivation1, statistically no different, were the strongest influencers on their performance, and environment2 (non-work-related external forces) was the weakest influencer. The qualitative results echoed the

quantitative results in that respondents had a lot to say about these two factors and the largest number of positive responses for any of the eight open-ended questions on the CAMEO factors was in the area of ability. Although the researcher expected to see that environment would be a stronger influencer of performance in this study than the Dlabach (2005) study due to the environmental pressure being exerted at this time with COC accreditation and other environmental stressors, the quantitative data did not support this expectation. However, the responses to the open-ended questions in the area of work-related environment included some strong opinions regarding work-related external forces, as shown in the comment below:

"Work-related Environmental Factors" influence greatly how we do business. These outside forces.... can and will, impact actual performance of your administrative responsibilities as an academic middle manager, but we learn to manager our resources until we can turn the corner of these seasons.

Aharoni et al (1978) found managers spend the most effort on environmental factors that would provide the greatest autonomy from the influence of that segment, and external agents do hold the technical colleges increasingly more accountable. Students expect the technical colleges to be flexible to meet their needs and to treat them as customers. Furthermore, in many cases, technical colleges are required to hire more adjunct instructors than full-time faculty to meet needs of the curriculum, and the colleges must constantly realign budgets to offset low levels of funding. Although these forces are in play, the State Board of Technical and Adult Education is still pushing all colleges to become regionally accredited while also planning to convert to a traditional semester system as soon as feasibly possible.

As a follow-up analysis, Pearson's *r* correlations were conducted to assess if a relationship existed between the CAMEO factors as suspected by the researcher. Correlation is a

correct statistical application when the research purposes, "are concerned primarily with finding out whether a relationship exists and with determining its magnitude and relationship," (Pagano, 1990, p. 117). Coefficients for the Pearson r correlation can range from -1.0 to 1.0 and can reveal two types of significant relationships, positive and inverse. An insignificant result indicates that a relationship occurred by chance. As Table 6.3 below shows, significant correlations existed for most pairs of factors. The result of the correlation between motivation1 and climate was significant, r(95) = 0.26, p < .05, suggesting a direct relationship between the two variables and that as reported influence from motivation1 (satisfaction) increased, reported influence of climate also increased. This makes sense because if one is more satisfied, he or she should perceive a more positive climate within both the institution and the work unit. The result of the correlation between motivation2 (perceived fairness) and climate was also significant, r(95) = 0.44, p < .01, suggesting that as reported influence from motivation2 (perceived fairness) increased, reported influence from climate also increased. Again, those who perceived that they were treated fairly also would feel the climate to be more positive. The result of the correlation between environment1 (work related) and climate was significant as well, r(95) = 0.33, p < .01, suggesting that, as reported influence from work-related environmental factors increased, reported influence from climate also increased. In addition, the result of the correlation between environment2 (non work-related) and climate was significant, r(95) = 0.30, p < .01, suggesting that as reported influence from non work-related environmental factors increased, reported influence from climate also increased; furthermore, the results showed a similar relationship between work-related environmental factors (environment1) and climate and non work-related environmental factors (environment2) and climate. The result of the correlation between opportunity to perform and climate was significant, r(95) = 0.33, p < .01, suggesting as reported

influence from opportunity to perform increased, reported influence from climate also increased.

The result of the correlation between motivation1 and ability was significant, r(95) = 0.39, p < .01, suggesting that as reported influence of motivation1 increased, reported influence of ability also increased. The result of the correlation between motivation2 and ability was significant, r(95) = 0.23, p < .05, suggesting that as reported influence of motivation2 increased, reported influence of ability also increased. The result of the correlation between environment1 and ability was significant, r(95) = 0.22, p < .05, suggesting that as reported influence of environment1 and ability was significant, r(95) = 0.22, p < .05, suggesting that as reported influence of environment1 increased, reported influence of ability also increased. The result of the correlation between opportunity to perform and ability was significant, r(95) = 0.40, p < .01, suggesting that as reported influence of ability also increased.

The result of the correlation between environment1 and motivation2 was significant, r(95) = 0.41, p < .01, suggesting that as reported influence of environment1 increased, reported influence of motivation2 also increased. The result of the correlation between opportunity to perform and motivation2 were significant, r(95) = 0.31, p < .01, suggesting that as reported influence of opportunity to perform increased, reported influence of motivation2 also increased. The result of the correlation between opportunity to perform and environment1 was significant, r(95) = 0.23, p < .05, suggesting that as reported influence of opportunity to perform increased, reported influence of environment1 also increased. The result of the correlation between opportunity to perform and environment2 was significant, r(95) = 0.23, p < .05, suggesting that as reported influence of environment1 also increased. The result of the correlation between opportunity to perform and environment2 was significant, r(95) = 0.23, p < .05, suggesting that as reported influence of opportunity to perform increased, reported influence of environment2 also increased. Table 6.3 shows the results of these correlations. These positive correlations show to what an extent the CAMEO factors are interrelated and evidence how greatly they interact.

Table 6.3

		Climate	Ability	Motiv1	Motiv2	Environment1	Environment2
Ability	r	0.13					
	Si g.	.229					
	N	95					
Motivation1	r	0.26*	0.39**				
	Si g	.012	.001				
	N.	95	95				
Motivation2	r	0.44**	0.23*	0.31**			
	Si g.	.001	.023	.002			
	N	95	95	95			
Environment1	r	0.33**	0.22*	0.27**	0.41**		
	Si g.	.001	.033	.007	.001		
	Ň	95	95	95	95		
Environment2	r	0.30**	0.19	0.19	0.18	0.19	
	Si g.	.003	.061	.060	.088	.063	
	Ň	95	95	95	95	95	
Opportunity to Perform	r	0.33**	0.20	0.40**	0.31**	0.23*	0.23*
	Si g.	.001	.058	.001	.003	.023	.025
	Ň	95	95	95	95	95	95

Pearson's r Correlations for CAMEO Factors.

Note. * *p* < .05 (2-tailed). ** *p* < .01 (2-tailed).

Research Question 2:

How does the technical college's regional accreditation experience level (experienced, less experienced, and inexperienced) mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the

Technical College System of Georgia?

The second research question focused on whether the regional accreditation experience level (experienced, less experienced, and inexperienced) mediated the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia. Category 1 (experienced colleges that were already accredited when the system converted to technical college status) included 12 colleges, and there were 31 participants from these colleges in the study. Category 2 (less experienced colleges that had become accredited by COC since the conversion to college status in 2000 or had become candidates) included 12 colleges, and 38 respondents from these colleges participated in the study. Finally, Category 3 (inexperienced colleges that had only applied or had not applied for COC accreditation) included 9 colleges, and 26 respondents were from these colleges.

First, a ranking of the means by COC experience level was done. Although the differences between the different groups (experienced, less experienced, and inexperienced) are not statistically significant, the rankings for each group are different from one another. The ranking of the CAMEO factors for the experienced and less experienced groups was identical. However, the ranking of the CAMEO factors for the inexperienced group of technical colleges that have either applied or not applied for candidacy was different. For instance, the inexperienced group thought that motivation1 (satisfaction) was the most influential factor with

ability being second. On the contrary, experienced and less experienced groups rated ability as the most influential and motivation1 (satisfaction) as second.

Analyzing the responses to open-ended questions for ability and motivation2 by group indicated some interesting differences. No one from the experienced group indicated a negative influence, and individual ability was the predominant theme focusing positively on the influence ability had on their performance. Of the responses from members of the inexperienced group, the positive focus was more on experience, education, and teamwork, but two negative remarks dealt with lack of experience.

When looking at responses to open-ended questions for motivation2 by group, the researcher noticed that the experienced and less experienced groups had similar comments about the topic of perceived fairness. However, when analyzing the comments for the inexperienced group, the researcher was immediately struck by the prevalence of negative comments. One highly frustrated AMM noted,

I feel that I am being treated unfairly by being blamed for things that go wrong, regardless of whether there is an ability to control the outcome. Upper management always says, "Well, you are the supervisor, so you have to take responsibility." But, I don't have their support in taking the responsibility down to the level where the error occurred....

Another respondent said, "Strong favoritism to certain faculty made the motivation of other faculty impossible." Still another made the comment below:

I rarely let the word "fair" enter my vocabulary. Nothing is fair, and you take what you have or get and make the most of it. As I mentioned earlier, there has been a great deal of

change within my organization within the past few years, and policies, procedures, and expectations have changed dramatically with each occasion.

One can see the frustration felt by members of the group of AMMs in inexperienced colleges.

Another notable difference was the ranking of opportunity to perform. The experienced and less experienced groups' scores for this factor ranked third. However, the inexperienced group ranked opportunity to perform in sixth place. Upon analysis of the responses to openended questions, however, the researcher found no major differences. The themes were consistent across all three groups as well as the distribution of positive versus negative responses.

As expected, the theme of COC accreditation arose in the responses to open-ended questions, and as the researcher suspected, the comments were from members of the inexperienced group. These comments arose in the follow-up question dealing with environment1, which dealt with work-related external forces. Noteworthy is the fact that no specific comments about COC were made by respondents from the experienced or less experienced groups. Furthermore, the comments that were made by respondents from the inexperienced group were positive comments showing that these respondents viewed COC as a good thing. One AMM from an inexperienced college stated, "Environmental factors have had a positive influence on my performance. A good example is COC Accreditation. This process does make you evaluate what you are doing and continuously work toward improvement."

Although no one from the less experienced group specifically commented on COC, the researcher feels that some of the negative responses were a result of pressure induced by the regional accreditation process. For example, one commented, "Those who make decision about my job duties, performance, and funding sometimes do not know what the job entails. There are

times that frustration can set in because of lack of support and funding to do the work." As an AMM herself from a technical college seeking regional accreditation, the researcher can empathize with the frustration felt by this fellow AMM from an inexperienced institution. The funding and other resources required for regional accreditation can be a huge stress on the AMM who is in the middle making efforts to keep both upper administration and faculty satisfied. Seeking regional accreditation is a costly venture, and during tough economic times, funding is even scarcer for projects like this.

Although some good information was uncovered through this survey, especially in the responses to open-ended questions, a better understanding is needed of how the stress of seeking and maintaining regional accreditation influences performance of AMMs. This study merely touched on this aspect since no questions on the survey asked directly about regional accreditation. The only question that addressed regional accreditation was the question on environment2, in which regional accreditation was imbedded along with all the other external work-related forces.

Research Question 3:

How does a requirement to teach mediate the relationship between the CAMEO factors and perceived performance of academic middle managers in the Technical College System of Georgia?

The third research question sought to discover whether the requirement to teach as part of the normal responsibilities of the workday would influence AMMs' perceptions of how the CAMEO factors influenced their work experience. Of the 95 usable responses, 19 AMMs indicated that they had teaching requirements as part of their normal workload, and 76 indicated that they were not required to teach. First, the means of CAMEO factors were ranked by group. It was interesting to note that the group required to teach ranked motivation1 as the most influential factor on performance, whereas those who were not required to teach ranked ability as the greatest influence on performance. Although the ranking of means showed differences in order, when the MANOVA was conducted, there were no statistical differences between the two groups on their scores for each CAMEO factor. The researcher was surprised that no significant differences were detected between these two groups because in Dlabach's study, significant differences were found between the groups that taught and did not teach for the factor ability.

Even though the statistical analysis showed no significant differences between groups, the responses to the open-ended questions revealed some inconsistencies. First of all, the qualitative data supported that AMMs who were required to teach expressed that they were overworked to a larger degree than those who were not required to teach. "This has been a negative influence because my academic work load is too great as compared to the administrative duties I have been assigned," one reported. Another AMM who is required to teach stated,

I am internally motivated...I don't need praise, etc. from superiors. My present frustration is with the required workload. I want to perform exceptionally in every task that is required of me. However, when tasks become too numerous and overwhelming I struggle internally and become stressed. Do I accomplish some of the tasks to my expectations or do I inadequately perform all the tasks-this is my internal battle!

Finally, one plainly stated at the end of the survey as an additional comment, "My role requires too much of one individual with the burden of both teaching and full time administration."

Those AMMs who were not required to teach also reported feeling overworked, but it

was not reported to the same degree as those required to teach. As one said, "Right now and for awhile now I feel overworked and like a hamster on a spinning wheel. It has always been work, work, work, but now feels very overwhelming." Another said, "Generally my motivation is good. When I do feel very unmotivated is when my work load is so heavy that I become frustrated and want to give up. Sometimes I put out fires all day and never get the things done that I need to do. There are often too many things demanding my attention at once." These comments show that the AMM role in general is rigorous, not just for those who are also required to teach.

Another difference detected in the qualitative data is that the group of AMMs who teach was more positive about perceived fairness (motivation2). For the most part, AMMs who taught thought that they were treated fairly, as stated in the following quote: "Motivation regarding perceptions of fairness has been a positive influence for me as an academic middle manager. I feel that I have been treated fairly and duties are divided equally among the other department chairpersons." On the other hand, perceived fairness was regarded more negatively by the group not required to teach. One person said that it was "always a challenge to make sure that my faculty and staff are treated fairly by others in the college."

In Dlabach's (2005) study, those required to teach indicated that ability was significantly less of an influence on performance than those not required to teach. In this study, the difference in the mean scores in the area of motivation1 (satisfaction) approached significance with p = 0.098, but statistically speaking, the difference was not significant. The results from this study contradicted Hunter and Hunter's (1984) findings that as job complexity increases, so does the influence of ability on job performance because AMMs who teach have a very complicated jobs. However, as Gmelch (2004) stated, it has been shown that most AMMs still regard themselves

more as faculty than as administrators. Waldman and Spangler (1989) concluded in their study that people adopt the performance values of groups to which they belong. If this is true, then these AMMs may view administration differently from those who do not teach and may account for the lower scores reported for ability as compared to motivation1 (satisfaction).

Research Question 4:

How does the technical college's management experience of academic middle managers (those with administrative experience outside the field of education and AMMs with no administrative experience outside the field of education) mediate the relationship between CAMEO factors and perceived performance of academic middle managers in the Technical College System of

Georgia?

First, a ranking of the CAMEO factor means was examined. Although the differences were not statistically different, the ranked order of the overall mean scores for each factor by group was different. The scores for both groups showed ability ranked first followed by motivation1 (satisfaction). However, the ranking between the two groups was different for the third spot. Those with management experience outside of education had opportunity to perform in the third position, whereas motivation2 (perceived fairness) was in the third spot overall for those with no management experience outside education. The fourth spot overall for both groups was climate, but the fifth spot was different with motivation2 (perceived fairness) for those with management experience outside education. The sixth and seventh spots for the group with no management experience outside the field of education were environment1 (work-related external forces) and environment2 (non-work-related external forces). For those with no management experience outside the field of education were environment1 were environment1 (work-related external forces).

opportunity and environment2 (non-work-related external forces) respectively. Again, these scores were very close, and no significant differences were detected with the MANOVA between these two groups.

Analysis of the qualitative data uncovered some differences among the responses of AMMs with management experience outside the field of education and those with no experience outside the field of education. First, those with management experience outside the field of education were more highly negative in their comments regarding institutional climate. They seemed to feel much more overworked and felt a greater lack of support than the ones who had no management experience outside the field of education. "We've had what might be termed a 'good ole boy' system for a long time now," said one AMM who had management experience outside the field of education. Another AMM in this same group stated, "This system has led to a lot of inequalities related to the institutional climate. It has had a negative affect on the institution as a whole. As an academic middle manager, these inequities challenge me to keep a positive attitude so that it doesn't affect my work unit." In addition, the comments regarding motivation2 (perceived fairness), were more negative among those with management experience outside education than among those with no management experience outside education. One with management experience outside the field of education commented, "The division of work is problematic---many of those in positions at this level are not thoroughly prepared for the responsibility." Another stated, "The perception of fairness has influenced my abilities at times -negatively when I didn't feel appreciated, felt overworked, or when the overall climate was negative...."

Gmelch (2004) reported that colleges and universities have a leadership structure that has no parallels anywhere within business and industry in the United States. Most times in business

and industry, managers come up through the ranks of administration by preparing along the way for the roles they will be expected to fill and performing administrative tasks in preparation for management roles. In contrast, most of the middle managers in the field of education are promoted to management positions, not for their performance as managers, but for their performance as faculty members, which is a much different role and varies tremendously across the academic divisions of the college; moreover, division heads receive very little training outside of teaching before entering management and do not understand the role they will need to fill before accepting the position (Gmelch, 2004).

Conclusions

The following conclusions have been drawn based on the findings of this study:

- 1. The CAMEO factors are highly related and work in conjunction with one another, not in isolation, and thus should be studied as they interact with one another instead of how they separately influence AMMs. The same themes, such as being overworked or having strong administrative support or a lack of administrative support, repeatedly emerged across responses to all of the questions. This feedback suggests that the interaction of the CAMEO factors should be studied instead of each one individually. If more research is done in this area, the researcher feels that the questionnaire should be revised more extensively so that the interaction of the CAMEO factors and the individual elements that constitute each CAMEO factor can be analyzed more effectively.
- 2. Environment does not influence AMM performance in the TCSG as much as the researcher had predicted. The researcher predicted at the beginning of the study that environment would have a strong influence on AMMs within the TCSG due to

several strong external forces being exerted at this time of change within the system. During the time of this study, several colleges were forced to merge and employees of all colleges within the TCSG were forced to take furlough days. However, even in a climate of such great environmental forces as theses, as a group, AMMs ranked workrelated environment and non work-related environment as the least influential factors. These results seem to disagree with the models of previous researchers (Hammons, 1982; Lawler, 1985; and Maehr & Braskamp, 1986). These researchers showed environment to be a factor that influences performance. Other researchers who did not include environment in their models, however, are supported (Blulmberg & Pringle, 1986; Cummings & Schwab, 1973; Vroom, 1964). Still, too many researchers have shown that environment should not be discarded from the model (Boyatzis, 1982; Hammons, 1982; Henderson, 1993; Mangham, 1986). Moreover, this study, although environment was ranked last, did show that environment provided a moderate influence. The adaptability and flexibility of AMMs may be one reason environment was not ranked very highly. Environmental forces are part of the normal work day, and as an AMM herself, the researcher does understand how these factors could be considered routine forces without much influence over performance. The pressures that AMMs must adapt to each day become routine, and AMMs realize they can do little to control these external forces.

3. AMMs in the TCSG do not receive sufficient preparation and ongoing staff development for the roles they are expected to fill. Several responses to the openended questions echoed the need for more preparation for this position. For example, one stated, "I have the perception that there is a wide array of differences in the

duties/responsibilities among those around the state at this level—that array impedes many of the cooperative activities that could be taking place." Another said, "...At a system and often at a college level, middle managers are given a great deal of responsibility with little decision making power. We also have one of the weakest support (peer) groups in the system..." These comments were supported by the quantitative data, which revealed ability to be the strongest influencer of performance. AMMs indicated that they needed support from various sources such as administration, faculty, family, and other sources in order to do their best jobs. If supported more, AMMs could be more productive and could feel more positive about their role in the system.

Recommendations

This section will offer recommendations for improved practice and future research.

Recommendations for Improved Practice

Based on the findings of this study, the following recommendations for improved practice are provided for the TCSG:

1. Since AMMs in the TCSG ranked ability (M = 6.12) as the most influential CAMEO factor, the system should develop staff-development programs specifically designed to improve skills necessary to be a successful AMM. Furthermore, reward systems should promote continued study and encourage participation in workshops, conferences, or seminars. The TCSG has developed exemplary staff development programs for faculty, but AMMs need specialized training that would help them become better leaders and managers over their respective divisions. Specialized training for AMMs should be of utmost importance. As stated by one person, "The

division of work is problematic---many of those in positions at this level are not thoroughly prepared for the responsibility."

- 2. The TCSG should consider standardizing the position titles of AMMs and thereby reducing the large variety of position titles currently used for AMMs within the TCSG. Creating a standardized position title for this role such as dean, which would be applied to all AMMs throughout the system, would uniformly identify and recognize AMMs across the TCSG as supervisors and leaders.
- 3. The TCSG should strengthen the peer group established for deans in 2007 to include all who serve the AMM role. AMMs need a strong peer group as a source of support and have expressed the desire for a strong peer group through the qualitative data provided in responses to the open-ended questions. Currently, all AMMs within the TCSG are not a part of this peer group. For example, the AMMs who supervise Adult Education services have not been included in this peer group yet. Although the Adult Education division of the system does not provide credit instruction, it does serve as a recognized feeder to credit programs, and these AMMs are supervising instruction as well. Furthermore, the AMMs who are department chairs at small colleges have not been included in the peer group. If department chairs continue to serve as AMMs, they should be recognized as the managers and leaders they are and be included in support systems provided by the TCSG for those in this role. As one AMM put it, "At a system and often at a college level, middle managers are given a great deal of responsibility with little decision making power. We also have one of the weakest support (peer) groups in the system." Strengthening this support group could help all AMMs in the system to feel better connected and better supported.

- 4. The TCSG should examine the workload of AMMs who are required to teach as part of their normal work load. The data generated in this study supported that the AMM role is rigorous, even for those not required to teach. A repeated theme of those who were required to both teach and perform administrative duties was that they felt overworked, as evidenced by the following representative statement from one of the respondents: "My role requires too much of one individual with the burden of both teaching and full time administration." Consideration should be given to allowing at least one agency-funded position at each technical college for an academic middle manager such as a dean of academic affairs who would not be required to teach classes and could directly supervise full-time faculty. This would alleviate much of the work that is assigned to department chairs who currently serve in the AMM role.
- 5. The TCSG should make pathways available for training of AMMs along with their immediate supervisors so that trust is built, and supervisors of AMMs are better able to delegate authority to these middle managers. AMMs in the TCSG ranked opportunity to perform as a strong influence on their performance (M = 5.25). Although most felt they had been provided the opportunity to perform, several respondents indicated in their responses to the open-ended questions that they felt a lack of opportunity to perform their assigned duties. Some felt they were micromanaged and felt as though they had little decision-making power, as evidenced in this statement: "Overall, the environment is oppressive. The leadership is autocratic. One might have the ability to perform but one has to be allowed to demonstrate the ability for good results. There is not much room for opportunity

under this type of leadership except to do what one is told to do." Attention should be given to remarks like this that indicate a lack of opportunity to perform.

- 6. Since motivation1 (satisfaction) was perceived by AMMs to be such a strong influence on performance, more attention should be given to regulating the AMM position and providing equitable treatment to all academic divisions. AMMs in the TCSG provided scores for motivation1 (satisfaction) that ranked second to ability with a mean of 6.01, which was statistically no different. Overall, AMMs felt supported and recognized by their supervisors. However, some did mention that they felt overwhelmed by the work load, confused by the ambiguous nature of the position, and not recognized or supported.
- 7. Since AMMs in the TCSG ranked work-related environment (M = 4.78) and non work-related environment (M = 3.48) as significantly less of an influence on performance than other CAMEO factors, this shows how flexible AMMs in the TCSG are. The agency should recognize AMMs' ability to carry on even under great pressure from external forces such as regional and national accrediting bodies, advisory committees, the state board, the legislature, and the community. Recently, during the time that AMMs were completing the CAMEO Questionnaire for this study, many AMMs were subjected to strong environmental forces that resulted in career changes due to the mergers discussed earlier. In addition to mergers, furloughs were also enacted at most technical colleges within the TCSG, which caused great concern for fiscal stability. Although these forces exerted great pressure within the agency, the AMMs took these pressures in stride and perceived themselves as able to effectively adapt to these forces. The qualitative data did show a greater influence of

these factors on individuals, but overall, AMMs rated environmental forces as only a moderate influencer. Previous research has shown that AMMs serve for roughly 5 years and this study supported that finding. Effort should be made so that the AMMs in the TCSG are retained in the system and trained for higher-level leadership roles.

Recommendations for Future Research

This study was delimited to AMMs in the Technical College System of Georgia and was a modified replication of a study conducted by Dlablach (2005) in the Illinois community colleges. Further research could apply the CAMEO factors to AMMs in two-year college systems in other states.

Since the CAMEO factors are interrelated to such a high degree, future research should study the interaction among CAMEO factors. A study of this nature could be quantitative, qualitative, or mixed-methods design.

Another suggestion for future research could be to analyze different populations of AMMs in Georgia. For example, AMMs in the two-year colleges of the USG could be analyzed, or a comparison of attitudes toward CAMEO factors could be analyzed between the AMMs in Georgia's two-year colleges in the USG and AMMs in the TCSG.

This study could also be a springboard for a qualitative study of AMMs who are required to teach. Since this group of AMMs is small compared to the entire group of AMMs, a qualitative study of these AMMs could be enlightening and provide useful data that the system could use to better support these AMMs who teach. The quantitative data in this study as well as Dlabach's (2005) study indicated that AMMs who are required to teach rated ability lower than those who are not required to teach. In Dlabach's study, ability was significantly less of an influence for those required to teach than those not required to teach. Finally, future research could analyze different groups of AMMs in the TCSG. For example, differences in attitudes toward the CAMEO factors could be analyzed between rural and urban AMMs or between AMMs in multi-campus colleges and those in single-campus colleges. Groupings such as these may give meaningful information and add to the literature base.

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Appendix A

Permission to Use CAMEO Questionnaire

Tiffany Daniel				
From:	Gregory Dlabach [GDIabach@aiuonline.edu]			
Sent:	Wednesday, December 05, 2007 3:41 PM			
To:	Tiffany Daniel			
Subject:	RE: Permission to Use Survey in Replication Study			

Tiffany,

My apologies for not responding sconer. My house has been wracked with illness. My 4-year old with ear infections and me with pneumonia. Everyone is on the mend though,

You indeed have my permission to use/modify the instrument used in my dissertation research. I wish you Godspeed and should you have any questions, or want to pursue presenting our results in the future, call on me any time

Sincerely.

Gregory W. Diabach, Ed.D. Mathematics Instructor, Lead Faculty Gdlabach@aluonline.edu

From: Tiffany Daniel [mailto:tdaniel@sandersvilletech.edu] Sent: Wed 12/5/2007 11:36 AM To: Gregory Dlabach Subject: Permission to Use Survey in Replication Study

Dear Dr. Dlabach

Thank you for granting me permission to use your survey in my dissertation research on academic middle managers in the Technical College System of Georgia.

Could you send me a message that I can use to document to my major professor that I received your permission.

Thanks again for your help.

Tíffany E. Daniel English Instructor

Department Chair, General Studies & Public Services Sandersville Technical College 1189 Deepstep Road Sandersville, GA 31082 478-553-2087 - Office 478-553-2118 - Fax Idaniel@sandersvilletech.edu



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Appendix B

CAMEO Questionnaire

performance of y	our adminis	trative re	sponsibili	ties as an	academic	middle ma	ast nager
Please click the best choic	No Influence	\bigcirc	\bigcirc	Influence	\bigcirc	\bigcirc	Strong Influence
Please describe in more o	letail how this influ	ence has been .	a POSITIVE or	a NEGATIVE infl	uence on your	performance as a	an U
academic manage					*		
					*		

Prese describe in more detail how this influence has been a POSITIVE or a NEGATIVE influence on your performance as an academic middle manager.	performance of your administrative responsibilities as an academic middle mana No Influence Standing	erformance of your administrative responsibilities as an academic middle manage induces in the influence in the influence is a cademic middle manager.	An influence Moderate Influence on your performance as a second manage of the best choice.	Pease click the best choice. Please click the best choice. Please describe in more detail academic middle manager.	No Influence	strative re	esponsibi	Moderate	academi	c middle ı	manag Stro
Influence Influence Influence in more detail how this influence has been a POSITIVE or a NEGATIVE influence on your performance as an academic middle manager.	Please click the best choice.	Influence Influence on your performance as an edesribe in more detail how this influence has been a POSITIVE or a NEGATIVE influence on your performance as an edemic middle manager.	Influence Influence Influence on your performance as an excedemic middle manager.	Please click the best choice. Please describe in more detail academic middle manager.	how this infl	O uence has beer	0	Influence	0		2 million
Please describe in more detail how this influence has been a POSITIVE or a NEGATIVE influence on your performance as an academic middle manager.	Please describe in more detail how this influence has been a POSITIVE or a NEGATIVE influence on your performance as an academic middle manager.	lease describe in more detail how this influence has been a POSITIVE or a NEGATIVE influence on your performance as an cademic middle manager.	Please describe in more detail how this influence has been a POSITIVE or a NEGATIVE influence on your performance as an takedemic middle manager.	Please describe in more detail academic middle manager,	I how this infl	uence has beer				\cap	C
academic middle manager,	academic middle manager,	cademic middle manager.	academic middle manager.	academic middle manager.			n a PUSITIVE (or a NEGATIVE in	fluence on you	ir performance	as an
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			Υ								
		Υ									
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4. MOTIVATION (WILLINGNESS TO USE ABILITY): Motivation is defined as the willingness to use your ability in the performance of the administrative responsibilities of an academic middle manager. It can be quantified through feelings of satisfaction. Feelings of satisfaction with certain workplace factors have shown to influence motivation. These factors include such things as the clarity of your role, the pace of work, the workload, your control of the work environment, the variety of work experiences you encounter, your achievement in those experiences (results), the manner in which your achievements are recognized, the orientation and development you have received for the position, the level of competition among your peers, the opportunities you are given to contribute to or improve the unit or institution, and the congruence between your effort and the institution's goals and priorities.

To what extent has motivation regarding your willingness to use your ability, as defined above, influenced actual past performance of your administrative responsibilities as an academic middle manager.

Margaret a

	to through the	623	822	Influence			Influe
Please click the best choice.	0	0	0	0	0	0	C
Please describe in more detail	how this infl	uence has beer	a POSITIVE o	r a NEGATIVE inf	luence on you	r performance	as an
academic middle manager.							
					A.		
					-1		

acader	nic middle n	nanager.	mance of	your aun	nnistrativ	e responsi	bilities as
Please clic	k the best choice	No Influence	\bigcirc	\cap	Moderate Influence	\circ	\circ
Please des	cribe in more deta	il how this influ	ence has been	a POSITIVE or	a NEGATIVE II	nfluence on your	performance as
academic	middle manager.					-	
						*	

6. ENVIRONMENT (WORK-RELATED): Work-related Environmental Factors are those external forces which may influence any aspect of your performance. Forces from the work-related environment include pressure from students, faculty, and local governing boards. Other forces originate with state legislatures, state coordinating boards, trade and industrial organizations, congress, government agencies, vendors, technology, and regional and specialized accrediting bodies.

To what extent have work-related environmental factors, as defined above, influenced actual past performance of your administrative responsibilities as an academic middle manager.

ise click the best choice. (ase describe in more detail how demic middle manager.	. this influence has bee	en a POSITIVE or	a NEGATIVE influ	Jence on your pe	C) (
ase describe in more detail how demic middle manager.	: this influence has bee	n a POSITIVE or	a NEGATIVE influ	ence on your pe	erformance as an
demic middle manager.			2		
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academic middle	Il past perfo e manager?	rmance of	f your adı	ninistrative	responsi	bilities a	s an
	No Influence			Moderate Influence			Stron Influer
Please click the best cho	ice. O	0	0	0	0	0	0
Please describe in more academic middle manag	detail how this infl er.	uence has beer	n a POSITIVE o	or a NEGATIVE inf	luence on you	r performance	as an
					Y		

8. OPPORTUNITY TO PERFORM: Opportunity to Perform is the chance given you to perform and receive feedback from your supervisor and your institution. Supervisory actions shown to influence performance include delegation, participation, job enlargement (new responsibility / authority), goal setting, resource (human, fiscal, technical, and information) allocation, performance appraisal, and the time to complete tasks. Institutional actions such as organizational policies, rules, practices, and procedures also influence performance.

To what extent has your opportunity to perform, as defined above, influenced actual past performance of your administrative responsibilities as an academic middle manager.

Please click the best choic	e. 0	0	0	0	0	0	C
Please describe in more di	etail how this influ	lence has been	a POSITIVE or	a NEGATIVE inf	uence on you	performance as	an
academic middle manager	r,						
				3	<u> </u>		
					T		

Demographic Information	
9. What is your gender?	
Male	
O Female	
10. What is your current position ti	tle?
11. How many years have you serv	ved in your present position?
	Number of years (rounded to nearest whole year)
Please click the correct choice:	
12. Are you required to teach as pa	art of your normal responsibilities?
() Yes	
O No	
If so, how many total weekly contact hours are you re	equired to teach?
Dean/Director of Academic Affairs	Round to nearest whole year.
Academic Attairs	
Director of Adult	×
Management Position Outside Field of Education	
Management Position in a different Education System (K-12 or Higher Education)	
14. Below this item is a categorizat level with COC accreditation status	tion of technical colleges regarding experience 5. Please choose the category that your college
falls into based on the grouping pr	ovided below:
Category 1	
Category 2	
0	
Category 3	
Category 3	
Category 3	

Category 1: COC Accredited at College Conversion in 2000	Category 2: Recently COC Accredited or Candidates for Accreditation	Category 3: Recently Applied for COC Accreditation or Not Applied	03
Athens Technical College Augusta Technical College Central Georga Technical College Chattahoochee Technical College Deklabi Technical College Griffin Technical College Gwinnett Technical College Bouthwestern Technical College Savannah Technical College Southwest Georgia Technical College West Central Technical College	Albany Technical College Appalachian Technical College Atlanta Technical College Atlanta Technical College Middle Georgia Technical College North Georgia Technical College North Metro Technical College Southeastern Technical College Swainsboro Technical College Waldosta Technical College West Georgia Technical College	AltamahaTechnical College East Central Technical College Flint River Technical College Heart of Georgia Technical College Lanier Technical College Mouthre Technical College Ogeochee Technical College South Georgia Technical College	
Savannah Technical College Southwest Georgia Technical College West Central Technical College	Swainsboro Technical College Valdosta Technical College West Georgia Technical College		
			1
15. Are there any addit	tional comments you	would like to make re	garding the
administrative role of a of Georgia?	academic middle man	agers within the Tech	nical College System
	*		
	<u>~</u>		

Appendix C

E-Mail of Transmittal

To: [Email]

From: tdaniel@sandersvilletech.edu

Subject: Factors Influencing Performance of Academic Middle Managers in TCSG

Body: Dear Colleague:

You have been identified as an Academic Middle Manager (AMM) within the Technical College System of Georgia. Since I am also an AMM within the system, I understand how complicated your job can be at times.

As a doctoral student at the University of Georgia, I have an opportunity to research the factors that influence the performance of AMMs in the Technical College System of Georgia. The definition of an AMM for the purpose of my research study is an administrator or faculty member who may have both teaching and administrative responsibilities, including the content and quality of curriculum, the evaluation and direct supervision of full-time and adjunct faculty, the scheduling of classes, and the development and management of a division budget.

I hope that you will be willing to help me with my research by completing a Web-based questionnaire. There are no foreseeable risks or discomforts to participating in this survey, which should take you approximately 20 minutes to complete. I am especially interested in any comments you are able to share in the open-ended questions. If you have any questions or experience any problems completing this survey, please contact me using the information provided below.

Names of all participants and institutions will remain confidential in the research report. Please note that Internet communications are insecure, and there is a limit to the confidentiality that can be guaranteed due to the technology itself. However, every measure is being taken to provide the highest level of security possible in a research study of this nature. The survey will be administered through SurveyMonkey.com, which is widely known to provide secure servers and one of the highest levels of security overall for a company of its kind. The data that I receive from the survey results will be handled with the utmost care and will be locked in a cabinet in my office to further ensure security. If you are not comfortable with the level of confidentiality provided by the Internet, please feel free to print out a copy of the survey, fill it out by hand, and mail it to me at the address given below, with no return address on the envelope.

This Web-based questionnaire is part of my dissertation research within the Institute of Higher Education at the University of Georgia and is under the direction of Dr. Christopher Morphew. He can be reached at morphew@uga.edu, should you have any questions for him.

Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, 612 Boyd GSRC, Athens, Georgia 30602-7411; telephone (706) 542-3199; email address irb@uga.edu.

Please follow the directions below to begin the survey. I would appreciate it if you could complete and submit your survey as soon as possible.

Here is a link to the survey: http://www.surveymonkey.com/s.aspx

This link is uniquely tied to this survey and your email address, please do not forward this message.

Thanks for your participation!

Tiffany E. Daniel Department Chair, General Studies and Public Services Sandersville Technical College 1189 Deepstep Road Sandersville, GA 31082 Office Phone: 478-553-2087 E-Mail: tdaniel@sandersvilletech.edu Fax: 478-553-2118

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list. http://www.surveymonkey.com/optout.aspx

Appendix D

Results from CAMEO Questionnaire Item 9: (N = 95)

9. What is your gender?	2	
Answer Options	Response Percent	Response Count
Male	40.0%	38
Female	60.0%	57



APPENDIX E

Results from CAMEO Questionnaire Item 10: (N = 95)

10	. What is your curren	t po	sition title?		
1	Dean of Academic Affairs	34	Director of Adult Literacy	67	Director
2	Dean	35	Campus Instructional Manager	68	Dean of Academic Affairs
3	Director of Instruction	36	Dean of Academic Affairs	69	Director
4	<mark>Dean</mark>	37	Public Service Department Chair	70	branch director
5	Dean Health Sciences	38	General Education/ Personal Services Department Chair / Mathematics Instructor	71	Dean of General Education and Learning Support
6	Director	39	Academic Dean	72	Dean of Adult Education
7	Division Director	40	Dean, Allied Health and Nursing	73	Director of Academic Affairs
8	department chair	41	Dean of Business	74	Dean of Instruction
9	Division Director	42	Dean of Adult Education	75	director of campus operations
10	Dean of Instruction	43	Dean of General Studies	76	Dean of Health and Public Safety Technologies
11	Dean for Academic Affairs	44	Dean-Allied Health Programs	77	Dean of Academic Affairs
12	Dean	45	Assistant Dean for Business and IT division	78	Dean
13	Dean of Adult Education	46	Dean of Academic Affairs	79	Director of Operation and Evening Programs
14	Dean	47	Executive Director of Adult Education	80	Director of Adult Education
15	Assistant Dean of General and Learning Support Education	48	Division Director	81	Director Of Instructional Technology
16	Adult Education Director	49	Dean	82	Dean of Academic Affairs
17	dean of adult education	50	Department Chair	83	Dean of Instruction
18	Department Chair	51	Dean	84	Dean
19	Director Transportation Department	52	Dean of Academic Affairs	85	Department Chair
20	Executive Director Adult	53	Dean of Instruction is what I filled this out as. Not the VPAA Lourrently have been for 1 month	86	Department Chair, Business &
21	Vice President for Adult Education	54	VPAA [recent promotion]	87	Curriculum Coordinator
22	Vice President	55	Dean of Instruction	88	Dean for Academic Affairs
23	Executive Director - Adult Education	56	Division Director	89	Dean for Academic Affairs
24	Dean	57	Dean	90	Dean of Instruction
25	Dean for Academic Affairs	58	Dean of Instruction	91	Dean
26	Dean	59	Dean of Academic Affairs	92	Dean of Technology in Academics
27	Dean of Academic Affairs	60	Dean Professional Services	93	Dean of Academic Affairs
28	Director	61	Associate Vice President	94	Dean
29	Campus Director	62	Dean of Evening Programs	95	Dean of Evening Administration
30	Dean	63	Campus Manager and Dean of Academic Affairs		KEY:
31	Instructor/Department Chair	64	department chair		Dean-60 (63%) Director-23 (24%)
32	Dean	65	Associate Vice President		Department Chair-9 (9%) Vice President -5 (5%)
33	Dean of Academic Operations	66	Dean of Academic Affairs, Health Technologies		Campus Instructional Coordinator-1 (1%) Curriculum Coordinator-1%

Appendix F

Results from CAMEO Questionnaire Item 11: (N = 95)

Ho (Ro	w ma ound	any y to ne	vear eare	s ha st v	ave vho	yoı le y	ı se vear	rve .)	d in j	your	pres	sent j	posit	ion?					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
15	21	11	8	5	7	6	5	0	7	1	3	2	1	0	1	0	0	1	1

Note: Respondents had the option of selecting from a drop-down list of numbers 0—40. No one

had served <1 or >20 years in present position.

Appendix G

Results from CAMEO Questionnaire Item 12: (N = 95)

12. Are you required to teach as part of your normal responsibilities?										
Answer Options	Response Percent	Response Count								
Yes	20.0%	19								
No	80.0%	76								

If so, how many	
total weekly	Number of Required
contact hours are	Weekly Contact
you required to	Hours
teach?	
1	5
2	10
3	15
4	30
5	30
6	15
7	20
8	0
9	15
10	20
11	5
12	20
13	3
14	10
15	5
16	20
17	15
18	15
19	15
Average	14.1



Appendix H

Results from CAMEO Questionnaire Item 13: (N = 95)

13. Indicate the total number of years of experience you have had in the following positions including your present position (round to the nearest whole year). Answer for all applicable positions:

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Dean/Director of Academic Affairs	14	11	10	7	4	4	3	1	4	1	6	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Department Head/Chair	8	4	5	3	9	7	3	4	7	3	2	0	2	0	1	2	0	3	0	1	1	0	0	0	1	0	0	0	0	0	0
Director of Adult Education Program	26	0	5	3	4	1	0	1	2	0	0	0	2	2	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Management Position Outside Field of Education	12	5	5	3	4	4	3	1	1	2	6	1	1	1	1	3	2	0	0	0	5	0	0	1	0	3	0	0	0	0	3
Management Position in a different Education System (K-12 or Higher Education)	20	1	1	1	2	2	0	2	1	0	3	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1

Note: Respondents had the option of selecting from a drop-down list of numbers 0-40. No one selected >30 years.

Appendix I

Results from CAMEO Questionnaire Item 14: (N = 95)

14. Below this item is a categorization of technical colleges regarding experience level with COC accreditation status. Please choose the category that your college falls into based on the grouping provided below:

Answer Options	Response Percent	Response Count
Category 1 (Experienced)	32.6%	31
Category 2 (Less Experienced)	40.0%	38
Category 3 (Inexperienced)	27.4%	26



Appendix J

Permission from TCSG to Conduct Research



GEORGIA DEPARTMENT OF TECHNICAL AND ADULT EDUCATION TECHNICAL COLLEGE SYSTEM OF GEORGIA SONNY PERDUE, GOVERNOR

Ronald W. Jackson Commissioner Dr. Freida H. Hill Deputy Commissioner

April 7, 2008

Ms. Tiffany Daniel Sandersville Technical College 1189 Deepstep Road Sandersville, GA 31082

Dear Ms. Daniel:

The Research Office of the Technical College System of Georgia has received the prospectus for your dissertation entitled *Factors Influencing Performance of Academic Middle Managers in the Technical College System of Georgia.*

Please let this letter serve as approval to conduct a survey of middle managers in the Technical College System of Georgia as outlined in your prospectus. The Research Office of the Technical College System of Georgia must have an IRB approval on file once you receive it. If you have any questions, please feel free to contact me at (404) 327-6839 or <u>skinney@dtae.org</u>.

Please let me know if our office can be of further assistance.

Sincerely,

Sandra Kinney, Research Manager Technical College System of Georgia

1800 Century Place, Suite 400, Atlanta, Georgia 30345-4304, 404 679 1660, Fax 404 327 6932