The Pennsylvania State University
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Department of Education Policy Studies

AN INVESTIGATION OF PUBLIC SCHOOL ADMINISTRATORS' ATTITUDES THAT IMPACT SCHOOL BUDGET-BUILDING IN THE UNITED ARAB EMIRATES

A Dissertation in
Educational Leadership
by
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ABSTRACT

This study examines K-12 public school administrators' attitudes and beliefs toward the public school budget-building process in emirate Abu Dhabi, UAE. This quantitative study examines the relationship between administrators' attitudes and adopted beliefs about school budget-building. Specifically, this study investigates if school administrators' backgrounds have an effect on administrators' attitudes and beliefs as it pertains to school budget-development in the UAE.

Ninety-three kindergarten, primary, and secondary school-based administrators (principals and vice-principals) employed in 50 public schools throughout Al-Ain City (in Abu Dhabi), UAE participated in the study. A survey instrument consisting of 11 demographic and background items and 29 statements concerning school administrators' attitudes toward school budget-development and allocation was used to gather the data. Participants were asked to provide their attitude along a strongly agree/strongly disagree continuum.

Public school budget-building in the UAE is developed by policy makers in the Ministry of Education (MOE). On-site school administrators are not involved in the budget-building process.

The study is important for the formulation and implementation of school-based budget policies, and for the design of budget-development reform initiatives and budget-training programs supporting UAE school administrators to be more effective leaders.
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Chapter 1

INTRODUCTION

In the United Arab Emirates (UAE), budgeting and financial procedures for schools are under the control of the various central government councils composed of the leaders or designates of each emirate (Watt, 2012). Budgets are regularly drawn up by ministry officials with the help of consultants. A Ministry of Education (MOE) committee on Regulations and Development drafts policy, budgets and implementation procedures (Watt, 2012). Hartman (2003) defines the process of budgeting as:

“The sequence of activities which are involved in planning the district’s educational programs, estimating the needed expenditures and revenues to implement these programs, gaining the necessary approval and using the budget to assist in managing the district’s operations.” (p. 4)

The Ministry of Education in the United Arab Emirates has implemented a new budget-building and allocation policy for the K-12 public schools that began at the start of the 2014-2015 school year. Previously, the MOE disbursed a fixed amount to each public school according to the school grade levels. The new policy will disburse school budget funds according to the number of students in each school. The budget is limited to fixed operating costs as determined by the MOE and does not allow on-site school administrators (principals and vice-principals) to utilize the budget according to school needs that may arise throughout the year (see Table 1). Personnel allocations or costs are not included in the MOE budget for schools. School administrators are calling for the MOE to reform the budget-building process in favor of one that
will be more inclusive when considering school expenses, and empower administrators to make adjustments within the total budget in order to spend according to school needs.

A fundamental belief of school leaders is that they would like to have a voice in the budget-building process. Slosson (2000) asserts, "it is the social aspects of school harmony and climate that dictate an open--even transparent--budgeting method. You need a process, and everyone, whether or not they agree, needs to see that process happen in a public arena" (p. 54). The extent to which the transparency of the budget-building strategies of the UAE's Ministry of Education (MOE) is made public to stakeholders is of interest to school administrators.

Growing expectations in the workplace and demands for a global economy have attributed to the rise of public schools standards in the UAE. Most often, the greater burden and accountability for school success is placed on the school administrator or leader of the school (Tirozzi, 2001).

This research investigates the attitudes and beliefs that contribute to a school administrators' sense of capacity for improving school quality under the current centralized budget-building and allocation system, and would provide significant insights for strengthening education leadership at the school level. An administrator's sense of capacity includes attitudes and beliefs about being able to use the budget for incentives to motivate and improve teaching practices in the UAE school under her/his leadership. For the purpose of this study, an "administrator" is a "principal" and/or "vice-principal" in a UAE public school grades K-12.
Table 1.

School Budget Items, Percentage of Total Yearly Budget Represented, and Type of Expense

<table>
<thead>
<tr>
<th>No.</th>
<th>Disbursement Acts</th>
<th>Percentage of total yearly budget</th>
<th>Allocation type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teaching Aids</td>
<td>25%</td>
<td>Films and recordings, Laboratories tools, Educational tools</td>
</tr>
<tr>
<td>2</td>
<td>Activities Supplies</td>
<td>10%</td>
<td>Art Education Materials, Tools Music, Theatrical activity, Cultural seasons processing</td>
</tr>
<tr>
<td>3</td>
<td>Stationery</td>
<td>25%</td>
<td>Office Tools, Imaging supplies, Calculator, Indicative plates</td>
</tr>
<tr>
<td>4</td>
<td>Phone, Fax, Mail</td>
<td>5%</td>
<td>Phone, Fax, Mailing, Internet</td>
</tr>
<tr>
<td>5</td>
<td>Awards and competitions</td>
<td>10%</td>
<td>Prizes and gifts for students, Competitions, Awards, Trips fees, The camps</td>
</tr>
<tr>
<td>6</td>
<td>Hospitality</td>
<td>5%</td>
<td>Hospitality Expenses, Hospitality Supplies, Flowers, House keeping</td>
</tr>
<tr>
<td>7</td>
<td>Maintenance</td>
<td>10%</td>
<td>Building Maintenance, Maintenance of furniture, Computer maintenance, Maintenance of machinery and equipment</td>
</tr>
<tr>
<td>8</td>
<td>Equipment and supplies</td>
<td>10%</td>
<td>Books and references, Fire-fighting equipment, Smart boards, Computer Programs, Office machines</td>
</tr>
</tbody>
</table>

Source: Abu Dhabi Education Council (ADEC, 2009)
Statement of the Problem

More than ever before, the school administrator is expected to create a climate that is conducive to teaching and learning; work towards improving student performance and be accountable for results; support and supervise teachers’ work in instruction and classroom management; supervise the use of the curriculum; ensure effective staff development programs, and that teachers improve their professional competence (Dias and Atkinson, 2001).

The Ministry of Education (MOE) in the UAE and in many other countries (e.g. China, Thailand, Singapore, Malta, Nigeria, Pakistan) holds the sole responsibility of creating a unified national curriculum and testing, determines funding, and guides school staffing efforts, and staff development (Oplatka, 2004). The only decision that school administrators have authority to make is the allocation of teachers to the various classes in the school (Fenech, 1994). Chi-Kin Lee and Dimmock (1999) purports that on-site school administrators have mainly been engaged as managers of discipline, ordering equipment and supplies, determining needs of faculty and staff, scheduling of activities, managing school finances and resources, and overseeing school documentation.

School administrators in the UAE often work under significant restrictions, such as chronic shortage of materials, operating funds, and staff development resources, which make instructional improvement extremely difficult to achieve. Due to this highly centralized decision making, on-site school administrators have no liberty to spend the budget on the school needs identified as requiring the most attention. Ill-advised budget-building and allocation policies may have unforeseen repercussions on education quality; therefore the UAE’s public school budget-building process should consider possible advantages and disadvantages in many areas before establishing policy.
Purpose of the Study

The purpose of this study is to investigate K-12 public school administrators' attitudes and beliefs toward the public school budget-building process in the UAE, specifically in Al-Ain city of Abu Dhabi. This quantitative study examines the relationship between administrators' attitudes and adopted beliefs about school budget-building. Specifically, this study investigates if school administrators' backgrounds have an effect on administrators' attitudes and beliefs about decentralized school budget-building in the UAE. The study is suggestive and hopes to have influence on budget-building policy and reform.

Significance of Study

Investigating the attitudes, perceptions, and beliefs of school leaders who impact their schools is important. With the many demands and tiring accountability placed on school leaders, these administrators are having a difficult time (Crow, 2006). To further this point, Hertling (2001) stated:

Today’s principal is faced with the complex task of creating a school-wide vision, being an instructional leader, planning for effective professional development, guiding teachers, handling discipline, attending events, coordinating buses, tending to external priorities such as legislative mandates, and all of the other minute details that come with supervising a school. (p. 1)

School leaders are now responsible for getting the most from the talents and skill sets of their faculty and staff in order to maximize student success. As a result, administrators work collaboratively with staff members to ensure that students’ needs are being met (Blasé & Blasé,
Included in ensuring that students' needs are being met is having the ability to make budgetary decisions that involve allocating school funds as reasonably needed.

This study is significant because it provides an understanding of school administrators' attitudes and beliefs about budget-building decision making in the UAE, and ultimately how the attitudes and beliefs influence administrators' school leadership. The results of the study could have implications on future school policies and school budget reform, especially due to the growing discourse calling for decentralized decision making designated by the MOE. There has not been a similar study done in the UAE and this research adds to the growing inquiry in the area of public school budget-building and educational leadership in the UAE.

Research Questions

The research questions addressed in this study are the following:

1. To what extent are school-based administrators satisfied with the budget-building process?
2. To what extent do school-based administrators desire to have more authority over budget-building and spending?
3. To what extent do school-based administrators believe in transparency and stakeholder involvement?
4. To what extent do administrators' background characteristics affect budget-building attitudes and beliefs?
5. Are administrator attitudes concerning budget-building different according to school grade level?
6. Are administrator attitudes concerning budget-building different according to school enrollment size?

Questions one, two, five, and six are directly addressing discourse and issues of concern facing the UAE education system. Specifically, questions one and two reflect the assumption that school-based administrators would like inclusion in the budget-building process and allocation, yet there are no existing empirical data to confirm the assumption. Questions five and six represent the most recent budget reform, from funding based on grade level to per pupil funding.

Questions three and four are adapted from two research questions in the Bird, Wang, and Murray (2009) study that surveyed school district superintendents in a U.S. southeastern state about their budget-building strategies. Question three is essential to ascertain administrators' attitude about a major characteristic of decentralization - transparency with stakeholders. Lastly, question four gauges the effect of administrators' background on forming their attitudes and beliefs.

**Limitations of the Study**

The research is limited to public schools in only one UAE city. In addition, the sample is not randomly selected, thus cannot represent the general population of public school administrators in the UAE. Considering the above two factors, as an alternative, the results should be treated as suggestive only.

The study is vulnerable to the limitations of self-reported data collection. The researcher cannot guarantee that all interviewees will convey their genuine attitudes and beliefs associated with the school budget-building process. Although there is movement toward more participatory
management in the UAE, the Arabian Gulf Region traditionally manages from an authoritarian approach. Some UAE administrators, who are citizens, may feel that any criticism of a government agency might jeopardize their career trajectory; while some other administrators, who are non UAE citizens, may feel any government criticism may threaten their job security. For example, the headline in an editorial in The National newspaper reads: ‘If teachers try to disrupt the education reforms, sack them’ (Safadi, 2008). It is reasonable to believe that administrators are under similar pressure, if not more, to conform. In addition to job related concerns, a couple of other factors may compromise participant responses and are more plausible: 1) administrators may feel that the survey is too long and might not dedicate the necessary time to respond appropriately; and 2) administrators might allow personal motives to bias their answers.

The amount of literature available was scarce. There is not much empirical research in this area of study in the UAE. The instrument is not an established questionnaire previously tested for validity by scholars, therefore the instrument was tested for reliability and construct validity measures via a 10 participant pilot study. In addition, validity of the instrument and study will use the technique of triangulation.

**Theoretical Framework**

**Reasoned-Action Approach**

The reasoned-action approach (RAA) provides a framework for understanding the attitudes, beliefs, and behavior (actual or perceived) of school administrators. The RAA is the continuation and advancement of two preceding theories: 1) theory of reasoned-action and 2)
theory of planned behavior originally developed by Fishbein and Ajzen (2010). Figure 1 shows a representation of the RAA model.

The RAA states that behavioral intention, which is the best indicator of actual behavior, consists of three variables: 1) attitude toward the behavior; 2) apparent norm (or the perceived social pressure to perform or not perform the behavior); and 3) perceived behavioral control (Fishbein and Ajzen, 2010). In other words, the more positive the attitude and perceived norm toward the behavior, and the stronger the perceived behavioral control, the stronger the behavioral intent to perform the desired behavior. However, behavioral intention is a good predictor of behavior merely in situations where people actually have control over the behavior mentioned.

Figure 1. The Reasoned-Action-Approach Model

Fishbein and Ajzen suggest that people hold numerous beliefs, but only a few of the beliefs (salient ones) are accessed in forming the determinants of behavioral intention. Figure 1 shows the three categories of beliefs that are associated with each of the three variables. Attitude
toward a behavior is formed when the strength of the beliefs associated with the behavior are weighted by the evaluation of the apparent outcome. A perceived norm is formed when the strength of normative beliefs are weighted by the “motivation to comply with the referent in question” (Fishbein and Ajzen, 2010). Lastly, Fishbein and Ajzen purports that perceived-behavior control is formed when the strength of control beliefs are weighted by the “perceived power of the control factor.”
Chapter 2

REVIEW OF RELATED LITERATURE

The purpose of this study is to investigate K-12 public school administrators' attitudes and beliefs toward the public school budget-building process in the UAE, specifically in Al-Ain city of Abu Dhabi. This quantitative study examines the relationship between administrators' attitudes and adopted beliefs about school budget-building. Specifically, this study investigates if school administrators' backgrounds have an effect on administrators' attitudes and beliefs about decentralized school budget-building in the UAE. The study is suggestive and hopes to have influence on budget-building policy and reform.

The UAE Education System

Notable progress has been made in the education sector since the founding of the United Arab Emirates (UAE) Federation in 1971. For example, the UAE government's goal of free access to education for all UAE citizens has been realized in a relatively short time. Despite this great achievement, the school system has been criticized immensely for a number of years (Syed 2003; Lootah, 2006). The school system in the UAE is now widely acknowledged as failing and 4 out of 10 Emiratis have abandoned the state system in favor of expensive private school alternatives (Lewis, 2008).

The United Arab Emirates' Ministry of Education (MOE) is responsible for the entire country's education system (i.e. primary, secondary, and higher education) throughout the seven emirates: Abu Dhabi (capital), Dubai, Sharjah, Ras Al-Khaimah, Umm Al-Quwain, Fujairah, and Ajman (Gaad, Arif, and Scott, 2006). The MOE assumes the roles of building new buildings,
hiring staff, determining the standards of education, providing curricular materials and support, coordinating a variety of educationally relevant activities and ensuring adequate programs are operating (Bradshaw, Lydiatt, Tennant, 2004).

Reforms are being introduced across the country at the national level. Simultaneously, the emirate of Abu Dhabi is initiating its own independent reforms while maintaining links with the MOE. In 2006, the governing body accountable for education in Abu Dhabi, known as the Abu Dhabi Education Council (ADEC), announced ambitious autonomous school reform plans. The ADEC also serves as a local educational authority for regions along the east of UAE. The ADEC was established in the year 2005; however, since January 2008, the ADEC became the sole supervising body for the Abu Dhabi Educational Zone (ADEZ). The ADEZ gained operational autonomy from the MOE and currently monitors all the programs and courses in the Abu Dhabi educational sector. The Council offers different types of assistance to education institutions across the UAE and also helps to improve and implement new procedures and policies which are intended to improve the current standard of education in the assigned regions. The ADEC is not a separate governing body equivalent to the MOE. The ADEC is a subsidiary of the MOE and does not set policy, rules, and regulations. The ADEC conceptually carries out the governing polices of the MOE in the selected emirates; however, the level of authority lacks clarity and the boundaries of autonomy can appear indistinguishable and unclear to observers.

**Budget-development in the Field of Educational Leadership**

Without funding, no program can be conceived, developed, and implemented. Finances allow educators to provide instructional services and programs. For administrators of schools, the budget should be a device to accomplish the objectives and goals of education. Moreover, the
administration should also have complete understanding how they can use their budget efficiently and how they can carry out educational priorities of their school (Hartman, 2003).

Instructional leadership has been one of the most popular themes in educational leadership over the past two decades (Leithwood, Jantzi and Steinback, 1999). However, the concept of ‘instructional leadership’ was not well defined. There remains an issue with scholars reaching congruence in identifying the behaviors which comprise instructional leadership. However, it is clear there are administrator roles within instructional leadership that are directly and indirectly affected by school budget.

Marzano, McNulty and Waters (2005), attest that the description of instructional leadership had achieved popularity over the years through their identification of a school leader's four roles which include the following: 1) providing resources and ensuring teachers have the needed budget, facilities and materials to carry out daily duties; 2) actively supporting day-to-day instructional activities and programs; 3) being an effective communicator when setting school goals and communicating them to employees; and 4) having a visible presence and easily being accessible to faculty and staff, and students.

Resource allocation in education helps ensure that educational resources are organized, managed and used effectively so that educational institutions can deliver better outcomes for the students and stakeholders. Educational leadership is an essential element of appropriate resource allocation at the school level. Neither the amount of money nor class size is what creates better educational outcomes. Education becomes more meaningful to students, parents, and teachers due to the proper allocation of the resources. Along with the assignment of funding schools, the assessment of success is how resources are translated into behaviors that address expressed educational goals at various educational levels (Lynch, 2011). According to Lynch (2011), there are three basic categories of resources: 1) Money, 2) Human Capital, and 3) Time. Educational
leaders must use resource allocation effectively for greater benefits. Not only does proper resource allocation increase the standard of schools, but it keeps all the people involved in the school satisfied such as children, teachers, parents, community, and other stakeholders (Clark, 2013, p. 20).

Failure by school administrators in the proper allocation of any one of the three resources previously mentioned, may result in complete failure. If an institution has an abundance of time and money yet the scarcity of the knowledge, proficiency and insight from the teachers (human capital) is lost, then the eventual outcome might be significantly lessened (Lynch, 2011). Reforms in budget-development and allocation are among the challenges school administrators often face. A review of the literature suggests competent educational leadership behaviors are appropriate for school administrators to be effective.

Site-based Budget Management

Decentralization can be defined as "the transfer of decision-making authority, responsibility, and tasks from higher to lower levels or between organizations" (Hanson, 1998, p. 112). Making changes involves not only decisions about accountability and what the controlling role of the governing bodies will be, but also making different decisions for different contexts (Skett, 2007) and for different cultures (Leung, 2004).

Depending on the scope of decentralization, principals, teachers, students, and parents may have responsibility for making a variety of decisions, such as educational goals, personnel, resource allocation, curriculum, finance, and student recruitment (Lai-ngok, 2004; Wong, 2003). Decentralization thus gives schools an opportunity to be more autonomous and flexible in making their decisions than if decisions are made centrally (Gamage, 2003).
School autonomy could be characterized as schools managing themselves, as school-based management, or as self-governing schools (Levacic, 2002).

Site-Based Management (SBM) involves the decentralization of decisions to the local school level for improving educational outcomes. Political goals, administrative competence, educational improvement, financial efficiency, and influences on fairness are the main reasons for educational decentralization according to Cohen (2004).

Most definitions of SBM consist of three core components: 1) the delegation of the authority to individual schools to make decisions about the educational program of the school including staffing, budget, and program; 2) the adoption of a shared decision-making model at the school level by a management team that includes the principal, teachers, parents, community members, and students, when appropriate; and 3) the expectation that SBM will facilitate leadership at the school level in school improvement efforts (Reynolds, 1997). According to David (1996), while motives for initiating SBM cover a vast range of reasons, “virtually all are cloaked in the language of increasing student achievement” (p.6).

In the United States (US) context, under SBM, the volume of the school district’s budget is assigned to the individual schools in a budget allocation based on relevant factors such as the number and nature of students and other factors. Decisions on the expenditures of these allocations are the responsibility of the principals, with support of the school faculty, staff and community. None of the funds are allocated for food services or student transportation (Kelly, 1990).

Kelly's (1990) research referenced the SBM parameters established by the school district in order to facilitate defining the degree of autonomy assigned to principals. The three parameters are:
1. Principals have the authority to establish the number of employees and the areas in which those employees work as long as the cost remains within the budget limit. Furthermore, principals have the final authority to recommend employee candidates for vacancies. Principals have the duty to decide how to assign positions, consistent with the school’s annual budget.

2. Principals have the opportunity to budget funds for the use of supplies and materials, and equipment within the budget limit allocated. They have the authority to control the amount used on building utilities as long as the funds used are within the amount allocated. However, principals do not have autonomy over cafeteria expenses or school transportation.

3. All principals must adhere to the laws of the governing body, and all schools must follow the prescribed curriculum and adhere to all policies, and national regulations and requirements (Kelly, 1990).

Under SBM, principals have been given the authority to make decisions regarding the school budget, personnel, and instructional programs in order to increase student learning outcomes and achievement. In addition, SBM empowers principals to implement a form of shared decision making that involves stakeholders (significant others) including other administrators, teachers, staff, parents, and students, where appropriate. SBM demands that principals are attentive to community groups, oversee expanded budgets, and perform various other activities which were conventionally associated with the duties of central administration (Daresh, 1998). Caldwell (2005) also notes that policy-makers should ensure that the financial allocation for each school meets their unique needs.
Practical Steps toward Budget Decentralization

Gregory (2008) identified different criteria set for the school principal when considering budget decisions. Although Gregory's scholarship targeted a for-profit educational system, the criteria identified are practical steps that can easily be adapted universally by public school systems, particularly in the UAE. The following are the five steps with modifications and implications for consideration in the UAE public school context:

Step 1: Strategic: The strategic charge is being crafted by the MOE from priorities and goals of the educational mission. Strategic criteria call for the proper development of tactics and rules for moving the entire activities of the educational institution in an effective manner. Devising a clear pre-planned strategy saves time of the principal which can be spent in performing other essential duties. The strategic step sets the basic guideline for an educational institute on which the entire budget process is evaluated and analyzed.

Step 2: Tactical: The administrator of the school, mainly the principal, playing the role of a leader, devises a tactical plan that incorporates specific timeline and steps for the purpose of implementation. The tactical step often provides benefit to the school for its purpose of efficiency (getting the most out of time and resources). It is considered as an essential step that forms the basis for the school administrator to move ahead with the plan designed.

Step 3: Review: Plans are continually checked by the school administrators who adjusts and identifies realities of educational operations. It is a midway step between tactical and operational step that evaluates the necessary tactics designed to achieve the strategy based on which approval is provided to move on to the next step. This step begins to address a major concern of school administrators in the UAE. Because the MOE issues a fixed operational budget to all schools, school administrators are not able to offer input and budget recommendations to fit the needs of their school.
Step 4: Operational: Operational and tactical levels discuss the issues of interest to staff so that adjustments could be identified which are needed to facilitate the process of implementation. The operational activities of the educational institution are performed at this stage that assist principal in achieving the desired aim of the institute. It is considered as one of the essential phase that consumes a greater level of time and effort. Again, it is clear that administrator input is fundamental to achieving the educational goals established by the MOE. School administrators are onsite and in the most favorable position to evaluate operational costs and activities of their school.

Step 5: Implementation: Plan is being reviewed by the MOE that has been designed tactically by the administration and is refined operationally by faculty members to analyze if it meets the strategic targets set by the MOE. It is the final step where the strategy is implemented realistically in the educational institution (Kimberlay, 2013). Not only does the final step help address individual school needs, faculty involvement helps teachers feel empowered within their school.

Espoused Beliefs of School Administrators

Pryor and Pryor (2005) purported that beliefs were acquired through 1) direct observation, 2) acceptance of information, and 3) by inferring new beliefs. Acquiring beliefs as it relates to school budget-development and allocation can be demonstrated in the following scenario. When public school stakeholders enter a school for the very first time, their direct observations of the school's standard and qualities automatically form their beliefs about the school. The beliefs formed are accepted or rejected based on information received prior to entering the school. If the school's reputation, or other types of information (including school-
budget discourse) was known prior to visiting the school, the stakeholders observations upon that first visit will formulate beliefs that either confirm or deny to some degree the information acquired before the school visit. Finally, beliefs are deduced based on what's already known (i.e. direct observation and acceptance of information). For example, if a prospective new school administrator believed the reputation that a school was well resourced, but upon arrival, the candidate noticed the school was in dire need of maintenance and equipment, then the candidate may infer that the school budget was not sufficient or used effectively. The espoused beliefs of school administrators are purported to have some effect on attitudes and perceptions related to school budget-building and allocation.

**Classic Persuasion Models**

**Theory of Reasoned Action**

Pryor and Pryor's (2005) Model of Reasoned-Action (MORA) concluded that "planned behaviors are ultimately determined by the beliefs that people hold." The authors identified three kinds of beliefs: 1) a thought that linked an object or person with a characteristic or quality; 2) a thought that linked one performing some behavior with the likely consequences or outcomes of that behavior; and 3) the thought that linked performing some behavior with the approval or disapproval of significant others (see Figure 2).
An example of the first belief type can be explained in the context of school administrators and school budget. When given certain characteristics or qualities of a school budget (e.g. WHO developed, WHAT has changed, WHERE to apply, WHEN is it of use, WHY the amount, and HOW did the MOE arrive at the amount?), school administrators evaluate the qualities and characteristics which assisted in formulating the school administrator's beliefs about the budget. As a result, the school administrator's attitude about a specific budget stems from their beliefs related to the characteristics and qualities of the budget.

Pryor and Pryor's (2005) second kind of belief can also be applied in the context of school administrators and budget. For example, if school administrators believed that budget-building based per pupil increased academic achievement, the administrator probably acquired supporting information, thus advocates for continued per pupil budget-development. These beliefs about students’ academic achievement and the comparative documentation of the achievements, formed the school administrator's attitude about advocating for per pupil budget-building.
Pryor and Pryor's (2005) third kind of belief is very relevant to school administrator's attitudes and beliefs in budget-building and allocation as a school leader. This belief associates the actions of the school administrator with the significant others (i.e. school stakeholders) perceived or confirmed agreement or disagreement of the administrator's actions. This belief is linked to the social intentions from social pressures described earlier. For example, school administrators may have strong beliefs about budget-building and allocation, however, their actions may conflict with the "significant others" beliefs if there is contradiction. The school administrator will have to decide to go either with their belief or choose an alternative method in effort to please stakeholders. Sometimes the actions may please certain stakeholders over others depending on the context of the social pressure.

Can research prove intentions are affected by attitudes and subjective norms? The relations between attitudes, subjective norms and intentions have been studied in a variety of fields. Sheppard et al. (1988) looked at 87 studies evaluating the relations between attitudes, subjective norms and intentions. The results of the study show a significant relationship between attitudes, subjective norms and intention. Ajzen and Fishbein (1973, p.49) reported on a review of 10 empirical tests that attitudes and subjective norms are good predictors of intentions ($R = 0.808$). Another indication that attitudes and subjective norms predict intentions ($R = 0.68$) was evaluated in a study by Van den Putte (1991, in Eagly and Chaiken 1993, p. 176), based on 113 TRA-articles. Other studies by De Boer (2003), and Bagozzi et al. (1992) furthermore support the idea that attitudes and subjective norms are good predictors of intentions.
**Theory of Planned Behavior**

Azen’s Theory of Planned Behavior (TPB) allows administrators' beliefs to be further described as behavioral, control and normative beliefs. Therefore, in TPB a person’s actions indicate what the person believes. Repeatedly, school leaders have expressed that reform initiatives have overwhelmed their ability to lead their school effectively (Bottoms and O’Neill, 2001; Tirozzi, 2001).

The Theory of Planned Behavior (TPB) is an expansion of the TRA and adds one more quantifiable construct: the perceived behavioral control (PBC). The TRA was designed with the belief that the subject has full ability to choose (i.e., control) over the targeted behavior. This constraint was extended to make the model more robust, resulting in the TPB (Ajzen, 1991). The TPB model is well supported by empirical evidence, and the addition of the behavioral control perception was shown to “account for considerable variance in actual behavior” (Ajzen, 1991, p.171).

![Diagram of Theory of Planned Behavior](image)

*Figure 3. The Theory of Planned Behavior by Ajzen (1991).*
To summarize the theory, the intention of a human to engage in a behavior appears to be modeled on three general categories as seen in Figure 3: the beliefs about engaging in the behavior (ZA), the opinions and influence of significant others (SN), and level of control the subject believes they have over the behavior (PBC).

Reasoned-Action Approach

The reasoned-action approach (RAA) is the theoretical framework guiding this study and was covered extensively in the Theoretical Framework section of this proposal. As a reminder, the RAA is a contemporary theoretical framework for understanding attitudes, beliefs, behavior and prediction. The RAA is an advancement of the two previous theories covered: 1) theory of reasoned action (TRA) and 2) theory of planned behavior (TPB). These theories have produced over a thousand empirical studies published in professional journals across disciplines (Fishbein and Ajzen, 2009). Fishbein and Ajzen argue that although human social behavior is complex, a set of variables can be applied to all types of behavior such that it can be understood and predicted. A main belief in question of this study is whether or not school administrators would be in favor of a decentralized school budget-development process in the UAE, and if there are correlations that may predict what "type" of school administrator (i.e. background variables) would be in favor of decentralization. The RAA hypothesize specific intended behaviors that represent actions of decentralization. Figure 4 below shows another depiction of the RAA to assist with understanding the relevance of RAA to the study.
Chapter Summary

The purpose of this study is to provide insight into the attitudes, beliefs, and perceptions of UAE public school K-12 administrators as it relates to budget-building and allocation. The research adds to the body of the knowledge in the education leadership field and provide information in the area of school-budget decentralization in the UAE. Because this issue is important to site-based administrators (i.e. principals and vice-principals), it is hoped that the results may facilitate further conversation among policy makers, educational leaders, and other stakeholders that would assist in the resolution of budget-building and allocation in the UAE.

In this chapter, we discussed site-based management (SBM) as a significant educational reform implemented throughout most of the developed world. However, the UAE and throughout the Arabian Gulf in general, still chooses centralized management as the main form of institutional and educational management. SBM has been sought after for many reasons,
primarily to improve student achievement as the ultimate outcome. The literature on SBM strongly suggests that a decentralized system impacts leadership practices of the school administrator, creating more diverse and complex responsibilities in addition to instructional leadership. The means to site-based decision making is to have the support and advocacy from stakeholders (e.g. teachers, students, staff, parents, community).

The three classic persuasion models have also been discussed. Ajzen and Fishbein’s (1980) theory of reasoned-action (TRA), which is known as a model of volitional behavior and a model of cognitive processes suggests that behavior is explained by intentions to act in a particular manner. The TRA model also assumes that administrators form their attitude towards a behavior by having a positive or negative evaluation of the intended behavior and form their subjective norms for a behavior by thinking about significant others’ perceptions (approval or disapproval) of their intended behavior.

Ajzen (1985) enlarged the model by adding perceived behavioral control to attitudes and subjective norms. He referred to his extended model as the theory of planned behavior (TPB), which considers non-volitional behavior. The TPB model assumes that people also form control beliefs that facilitate or impede their intention to carry out the behavior. This extended model has also been empirically tested through many studies in different fields.

Lastly, Fishbein and Ajzen (2010) have outlined the reasoned-action approach (RAA). The RAA is an extension of both TRA and TPB. Due to the richness from expanding on the previous two theories, the RAA seems most appropriate as the theoretical framework for the study. The model comprises three major components: attitudes towards the behavior, subjective norms and perceived behavioral control. In combination, the three components form a behavioral intention to perform or not to perform the behavior in question. Conceptually, this framework does not assume rationality, but assumes a reasonable, consistent, and automatic process from
beliefs about engaging in the behavior of interest. We expect that administrators from different backgrounds may have different attitudes, subjective norms, and perceived behavioral control.
Chapter 3

METHODOLOGY

The purpose of this study is to investigate K-12 public school administrators' attitudes and beliefs toward the public school budget-building process in the UAE, specifically in Al-Ain city of Abu Dhabi. This quantitative study examines the relationship between administrators' attitudes and adopted beliefs about school budget-building and administrator characteristics. Specifically, this study investigates if school administrators' backgrounds have an effect on administrators' attitudes and beliefs about decentralized school budget-building in the UAE. The study is suggestive and hopes to have influence on budget-building policy and reform.

Research Questions

This study addressed six questions concerning on-site school administrators' attitudes concerning the current budget-building and allocation process:

1. To what extent are school-based administrators satisfied with the budget-building process?
2. To what extent do school-based administrators desire to have more authority over budget-building and spending?
3. To what extent do school-based administrators believe in transparency and stakeholder involvement?
4. To what extent do administrators' background characteristics affect budget-building attitudes and beliefs?
5. Are administrator attitudes concerning budget-building different according to school grade level?

6. Are administrator attitudes concerning budget-building different according to school enrollment size?

Research Design

Population

The population for this study are site-based administrators in the K-12 public schools in the Abu Dhabi Emirate of the UAE. The representative sample of the population are K-12 public school administrators in Al-Ain city of Abu Dhabi. According to the United Arab Emirates National Bureau of Statistics (2015), Abu Dhabi has 245 public schools and 106 of the public schools are in Al-Ain, which is more than any other city in the UAE. Another reason Al-Ain was selected is because of researcher familiarity. The researcher taught in four different public schools throughout Al-Ain during a 10 year period and served six years as an Assistant Principal in the City.

Research participation is not customarily supported well in the UAE education sectors. Administrators in UAE, particularly citizens, may feel more inclined to participate according to a connection to who is requesting. The researcher expects that his background as a local public school teacher and administrator helped increase the survey response rate. Figure 5 provides a geographical representation of where the population and sample are located within the UAE.
Participants

Emails were sent to 100 site-based administrators from 50 public schools in the city of Al-Ain. The 50 public schools comprise the following: 10 Kindergarten level, 10 Elementary level, 10 Middle School level, 10 High School level, and 10 schools with combined level grades (i.e. Kindergarten - Elementary or Middle - High School). Ninety-three administrators participated in the survey. One of the returned questionnaires was considered unusable based on the pattern of responses (i.e. participant selected 1 and 2 in sequence throughout the entire questionnaire). Therefore, after cleaning the data, the final analysis consists of 92 participants.

Variables

The study focuses on ascertaining which attitudes and beliefs, represented by a set of variables, are most salient to school administrators regarding school budget-building. According
to the Reasoned-Action Approach, background factors, beliefs, and attitudes are predictors of intended behavior. Decentralization is a belief that is demonstrated by different actions.

The variables for the study representing demographic characteristics of the sample include (1) gender, (2) age, (3) years of teaching experience, (4) UAE citizen/non citizen, (5) highest degree completed, (6) current position title (7) years in current position, (8) years as a public school administrator, (9) experience in a school system of decentralized management, (10) student enrollment, and (11) grade levels in their school. The selected background and demographic variables of administrators are crucial for richer understanding of the data.

**Instrumentation**

A questionnaire was constructed to rank influences of the various attitudes, and gauge the levels of importance for each. There was only one study found by the researcher that measures the constructs proposed in the study. Bird, Wang, and Murray (2009) conducted a study surveying school district superintendents in one U.S. state about their budget-building strategies. Bird, Wang, and Murray's questionnaire was a collection of items conceived from the lead author's 31 years of school leadership experiences. The questionnaire for this proposed study was conceptualized and supported by three sources: 1) a subject matter expert's (SME) questionnaire, 2) literature review, and 3) the researcher's 6 years of experience as a vice principal in Al-Ain city, UAE.

James J. Bird is the SME and first author cited in the above mentioned study. He has 15 years experience in school principalship roles and 16 years of experience as a superintendent managing the budget in the U.S. context. His experiences guided the development of the questionnaire in Bird, Wang, and Murray (2009). Moreover, the literature review of public
administration and educational leadership scholarship cited, provided elements of inquiry along with scholarship on dispersed governance from Colburn and Horowitz (2003), and Posner (2009). In addition to the literature review already referenced in the study, Alexander, Paterline, and Hulsey (2007) provided additional helpful scholarship on citizen involvement. The experiences of the researcher assisted in contextualizing the study due to the familiarity of the prevailing relevant discourse in the educational sector of the UAE. The researcher's experience, the experiences of the SME, and the extensive literature review collectively validate each other. Therefore, all three sources contributed to the formulation of the questionnaire for this proposed study.

The questionnaire addressed the research inquiry of the study. The instrument used in this study is a 40-item survey (see Appendix). It is composed of two main parts -- 1) background characteristics of participants and 2) their attitudes about the budgeting process. The background section collects information on participants' demographic information (Items 1, 2, 4), career path and administrative experience (Items 3, 5-9), and school profile (Items 10, 11). The second section of the questionnaire asks participants to indicate their degree of agreement or disagreement with a series of questions designed to measure their attitudes and beliefs about what an appropriate budgeting process should be. These questions relate to the openness/transparency of budget-building process (Items 12, 14-19, 26-28, 33-35, 37, 38), communication management strategy (Items 13, 20-25, 29-31, 32, 36, 39), and on-the-job training (Item 40). The items assessing attitudes and beliefs were statements about the budgeting process asking participants to respond on a six point scale of agreement/disagreement (1=strongly disagree, 2=disagree, 3=slightly disagree, 4=slightly agree, 5=agree, and 6=strongly agree).

If a school administrator were to fulfill a role in budget building, she or he would be faced with questions concerning transparency, procedures, and personnel management. Two
constructs were developed to measure attitudes and beliefs toward openness/transparency, and communication management. The 15 openness/transparency questions asked who should be involved in the formation, approval, and discharge of the budget; whether procedures should be limited to writing, and published for community awareness; and if there should be regularly scheduled communications with stakeholders regarding the budget-building process. The 13 communication management strategy questions asked if decisions should be data driven; if there should be a connection between needs and uses; and if there should be an assessment system for future improvement. Because openness/transparency of the budget-building process and communication management strategy have distinctive functions in this study, they were measured for construct validity.

Validity and Reliability

Several strategies were used to strengthen the questionnaire’s validity, reliability, and trustworthiness. Strategies were incorporated into each phase of the research. Peer review and debriefing subject matter experts helps to ensure personal biases are not affecting the scholarship. Obtaining different viewpoints from informed but uninvolved participants is a primary goal of peer debriefing (Lincoln and Guba, 1985). Using a peer reviewer provides a check on misdirected interpretations and a different perspective on the survey instrument. Moreover, the instrument was translated into standard Arabic language to increase precision by the researcher. The Arabic version of questionnaire was also verified by an Arabic language specialist from Penn State University. Then, as instructed in the IRB protocol, the instrument was translated back to English by another native Arabic speaker to support the validity of the language translation.
To assist in establishing an instrument that is trustworthy, a pilot study was conducted on a group of 10 public school administrators who are not part of the study sample group. The pilot study participants were located in the city of Abu Dhabi within the Abu Dhabi Emirate. The pilot study serves the purpose of testing the survey instrument and method. In addition, the pilot study tests the understanding and interpretation of the questionnaire by participants, and ensure the study is measuring what it is intended to measure (i.e. construct validity). Moreover, it provided an estimation of the response rate expected from the main study. The pilot study results are useful for a component of the triangulation method in validating the findings of the proposed study. The mean summary of the pilot study items measuring school budget-building attitudes/beliefs was 5.08 with an acceptable standard deviation of 0.73.

All pilot study participants completed the survey. The responses to each of the non school demographic and administrator background items were consistent among the 10 participants. No outlier data were visible, and the participants reported that the survey was easily understood. The results reflect the researcher's expectation, and are consistent with the literature that supports a preference for site-based administrator inclusion over a strictly centralized higher-management budget-building decision making process.

Data Collection

A questionnaire was developed for the purpose of surveying the participants and collecting data from each of the 50 public schools in the city of Al-Ain. The first step to collecting data for this study was to contact the UAE Embassy in Washington, DC, and the UAE University in the UAE to request recommendation and support letters that explains the nature and the purpose of the study. Next, following receipt of these letters, they were submitted to the MOE
and the ADEC for permission to allow the researcher to gather data from the school administrators. Upon obtaining permission, the administrators were contacted by email to explain the nature of the study, and kindly asked for their participation. Researchers have found that the response rate increases from contacting the target group before sending a questionnaire (Gall et al. 2003). This is considered the precontact. A precontact involves the researchers identifying themselves, discussing the purpose of the study, and requesting cooperation (p. 231). Ideally, the electronic questionnaire is to be emailed soon afterwards. However, for the purpose of efficiency, the contact email provided participants with the link to the web-based survey.

This data collection method was based on Creswell’s (2003) suggestion to implement the four-phased data collection sequence outlined by Salant and Dillman (1994), except for the pre-notice email phase informing that a questionnaire is forthcoming. An adaptation is as follows:

Phase I. Send an email explaining the study and ask for a response to the accompanying questionnaire.

Phase II. Follow-up with a friendly reminder email for the nonrespondents to complete and return the questionnaire.

Phase III. Email a replacement questionnaire (if necessary) and communicate a more personal and noticeable tone to complete and return the survey.

**Data Analysis**

The goal of this study is to have better understanding of K-12 public school administrators’ attitudes and beliefs toward the public school budget-building process in the UAE, specifically in Al-Ain city of Abu Dhabi. Selected data were correlated with selected characteristics of the sampled administrators. The study hypothesized that administrator
background variables have an effect on their attitudes. Collecting these data introduced correlations that enhanced the findings.

The following steps were used to analyze the data of this study:

1. The analyses utilized an Excel spreadsheet to enter, organize, and analyze the results of the questionnaire.

2. Data were coded as needed for statistical analysis. Administrator characteristics (questions 1-11) was coded as follows:
   - Gender: Male = 1, Female = 2
   - Age: 20-25 = 1; 26-30 = 2; 31-40 = 3; 41-50 = 4; 51 and over = 5
   - Years of teaching experience: (a) = 1 through (d) = 4
   - UAE citizen: Yes = 1, No = 2
   - Highest degree earned: Associate's = 1, Bachelor's = 2, Master's = 3, Doctoral = 4
   - Current position: Principal = 1; Vice Principal = 2
   - Length of time in current position: ≤ 3 years = 1; 4-6 years = 2; 7-10 years = 3; > 10 = 4
   - Years as a public school administrator: ≤ 3 years= 1; 4-6 years= 2; 7-10 years= 3; > 10= 4
   - Experience with decentralized management school system: Yes = 1, No = 2
   - Number of students enrolled at your school: (a) = 1 through (e) = 5
   - Grade levels at current school: (a) = 1 through (e) = 5

To complete the analytical data set, the attitude responses for each participant was added to the spreadsheet so that the result was a matrix with the columns for the responses to the questions in the questionnaire (one column per question) and the rows contained each participant's answers (one row per participant).
3. To facilitate the analysis, a separate spreadsheet tab was created for each category of the attitude questions along with their responses. These separate collections include the background characteristics and the attitude questions for that category. This allowed a more detailed examination of both the individual questions and the overall attitudinal category.

4. Microsoft Excel was used for descriptive statistical measures (e.g. frequency, mean, percentage, and standard deviation) for entire sample and for each sub-group (characteristic) to compare across characteristics.

5. Analysis of Variance (ANOVA) was to answer: Do changes in the demographic and background variables have significant effects on the three constructs?

The method of triangulation was used to validate the findings by drawing on corroborative evidence. Triangulation is the process of using multiple data-collection techniques, data sources, analysis, or theories to check the validity of case study findings (Gall et al. 2003). This study used the results from the pilot test and returned study questionnaires to check the validity of case study findings in the literature review. Moreover, because openness of the budget-building process, and communication management have unique roles in the study, they were subject to construct validity scrutiny. The reliabilities of the two key constructs measured well at: 0.72 for openness of budget building process and 0.78 for communication management strategy. The 0.06 difference is within a range for reliability.
Chapter 4

**RESEARCH FINDINGS**

The purpose of this study is to investigate K-12 public school administrators' attitudes and beliefs toward the public school budget-building process in the UAE, specifically in Al-Ain city of Abu Dhabi. This quantitative study examines the relationship between administrators' attitudes and adopted beliefs about school budget-building and administrator characteristics. Specifically, this study investigates if school administrators' backgrounds have an effect on administrators' attitudes and beliefs about decentralized school budget-building in the UAE. The study is suggestive and hopes to have influence on budget-building policy and reform.

**Overview of Statistical Procedures**

The study's participants were asked to rank 28 contributors of administrator attitudes and beliefs (i.e. Items 12 - 39) from (1) Strongly Disagree through (6) Strongly Agree as perceived by the target group. Thus, the “score” of each Likert scale item was to determine the variable's relative influence on attitudes/beliefs regarding the current UAE budget-building process, particularly as it relates to government centralization versus decentralized site-based administrator inclusion. Therefore, the mean score from Items 12 - 39 addressed research question one.

Research question two was answered by the *communication management strategy* items on the questionnaire (i.e. Items 13, 20-25, 29-31, 32, 36, 39). The communication management strategy items are authority (management) based assessment items. We can deduce a school-based administrator's attitude regarding authority/management strategy over the budget-building
Research question three was related to the openness/transparency of the current budget-building process (i.e. Items 12, 14-19, 26-28, 33-35, 37, 38). Therefore, the attitudes/beliefs of this construct was deduced by the mean score of those items.

Lastly, research questions four, five, and six were answered by correlation calculations. A comparison table gives insight to see contributing factors of school demographics and administrator backgrounds on the attitudes/beliefs of administrators regarding school budget-building.

**Data Analysis**

**Research Question 1: To what extent are school-based administrators satisfied with the budget-building process?**

The mean scores representing 92 administrator attitudes toward the current centralized budget-building suggests administrators in Table 2 shows that the respondents collectively agree with the items in the questionnaire. Questionnaire items 12 through 39 represent attitudes/beliefs supporting a decentralized budget-building process contrary to the current process in the UAE. To gauge satisfaction/dissatisfaction, the responses are conceptualized on an corresponding scale of 1) very satisfied; 2) satisfied; 3) slightly satisfied; 4) slightly dissatisfied; 5) dissatisfied; and 6) very dissatisfied. Therefore, the mean score of 5.04 from the 92 respondents clearly supports that school-based administrators are dissatisfied with the current budget-building process.
Table 2

Administrators' Satisfaction with Current School Budget-Building Process

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 12: should be largely delegated to the school administrator.</td>
<td>92</td>
<td>4.63</td>
<td>1.42</td>
</tr>
<tr>
<td>Item 13: should be a matter of adopting a set of ideas rather than a set of numbers.</td>
<td>92</td>
<td>5.36</td>
<td>.83</td>
</tr>
<tr>
<td>Item 14: should be totally within the scope of the administration; no community...</td>
<td>92</td>
<td>3.61</td>
<td>1.53</td>
</tr>
<tr>
<td>Item 15: create a forum through which ideas can be converted into reality.</td>
<td>92</td>
<td>5.49</td>
<td>.56</td>
</tr>
<tr>
<td>Item 16: Community involvement...should be formalized with written procedures...</td>
<td>92</td>
<td>4.75</td>
<td>1.15</td>
</tr>
<tr>
<td>Item 17: Input from non-administrative sources should be heavily considered...</td>
<td>92</td>
<td>5.35</td>
<td>.56</td>
</tr>
<tr>
<td>Item 18: Access...should be extended to all interested parties.</td>
<td>92</td>
<td>5.14</td>
<td>.93</td>
</tr>
<tr>
<td>Item 19: Non-employee participants...should represent the diversity of the community</td>
<td>92</td>
<td>4.60</td>
<td>1.19</td>
</tr>
<tr>
<td>Item 20: Data from student assessment systems should be used extensively...</td>
<td>92</td>
<td>5.12</td>
<td>.89</td>
</tr>
<tr>
<td>Item 21: The curriculum revision process... should be aligned with budget calendar</td>
<td>92</td>
<td>5.29</td>
<td>.83</td>
</tr>
<tr>
<td>Item 22: Data from the HR office concerning staffing needs should be considered...</td>
<td>92</td>
<td>4.57</td>
<td>1.36</td>
</tr>
<tr>
<td>Item 23: The adopted budget document should include the Ministry's philosophy, ...</td>
<td>92</td>
<td>5.28</td>
<td>.72</td>
</tr>
<tr>
<td>Item 24: The...budget document should include language linking programs to funding</td>
<td>92</td>
<td>5.47</td>
<td>.56</td>
</tr>
<tr>
<td>Item 25: ...should outline the connection between school needs and allocation</td>
<td>92</td>
<td>5.48</td>
<td>.52</td>
</tr>
<tr>
<td>Item 26: Roles...should be available in writing and published for staff and community</td>
<td>92</td>
<td>5.41</td>
<td>.65</td>
</tr>
<tr>
<td>Item 27: The adopted budget document should be available to any interested citizen.</td>
<td>92</td>
<td>4.63</td>
<td>1.22</td>
</tr>
<tr>
<td>Item 28: There should be an appeal process established...</td>
<td>92</td>
<td>4.98</td>
<td>.90</td>
</tr>
<tr>
<td>Item 29: Budget questions and suggestions should be [considered] for future use...</td>
<td>92</td>
<td>5.26</td>
<td>.53</td>
</tr>
<tr>
<td>Item 30: There should be written guidelines describing how disputes will be settled...</td>
<td>92</td>
<td>5.05</td>
<td>.88</td>
</tr>
<tr>
<td>Item 31: The principal should be the authority in school-based concerns...</td>
<td>92</td>
<td>4.59</td>
<td>1.45</td>
</tr>
<tr>
<td>Item 32: There should be a published timeline established for the introduction of ...</td>
<td>92</td>
<td>5.33</td>
<td>.52</td>
</tr>
<tr>
<td>Item 33: A draft of the proposed budget should be placed on public display first...</td>
<td>92</td>
<td>4.83</td>
<td>1.04</td>
</tr>
<tr>
<td>Item 34: Principals should be required to...discuss budgetary matters with their staffs.</td>
<td>92</td>
<td>5.39</td>
<td>.61</td>
</tr>
<tr>
<td>Item 35: There should be incentives in place to reward innovative suggestion...</td>
<td>92</td>
<td>5.30</td>
<td>.55</td>
</tr>
<tr>
<td>Item 36: There should be a systemic assessment program applied...</td>
<td>92</td>
<td>5.36</td>
<td>.59</td>
</tr>
<tr>
<td>Item 37: Directives given to external auditors should be published and available...</td>
<td>92</td>
<td>4.76</td>
<td>1.26</td>
</tr>
<tr>
<td>Item 38: A budget adoption calendar...should be published and distributed ...</td>
<td>92</td>
<td>4.83</td>
<td>1.09</td>
</tr>
<tr>
<td>Item 39: ...there should be a written policy guiding how amendments...will be made.</td>
<td>92</td>
<td>5.17</td>
<td>.62</td>
</tr>
</tbody>
</table>

Note: The above descriptors of items 12 - 39 are abridged from the survey instrument's items 12 - 39.
Only Item 14 was originally written where a low score reflected a more positive budgeting approach supporting openness and transparency instead of a less positive approach. To adjust this misalignment, the responses of Item 14 were modified by reversing the originally coded scores to have the scores correspond to the direction of positive scores, alike the other statements (i.e. responses originally coded as 6 were changed to 1; original 5s were changed to 2s; and original 4s were changed to 3s). Since the responses were relatively evenly divided between agree and disagree responses, the mean score for Item 14 changed only slightly from the pre-adjusted original coding of 3.39 to 3.61 with the revised coding. The adjustment only increased the mean score of Items 12 through 39 from 5.03 to 5.04.

Although an acceptable standard deviation should be below one, there are 10 items with notably high standard deviations. A standard deviation above one is considered rather high on a six point scale and indicates that the data points are spread out over a wider range of values from the mean of the set (i.e. 5.04). Exploratory Data Analysis (EDA) is used as a method for discovering unforeseen or unexpected patterns in the data, thus gaining new insights and understanding of natural phenomena. Therefore, EDA on research questions two and three was used to explain the high standard deviations.

Research Question 2: To what extent do school-based administrators desire to have more authority over budget-building and spending?

The 13 communication management strategy questions gauge administrators' desire for data driven budget decision making; and if there is a desire for administrators to link budget need with budget uses; and having the authority to implement future improvement. Table 3 shows that the administrators agree they should have more authority over budget-building and spending.
To gauge desire/don't desire, the responses are conceptualized on a corresponding scale of 1) *strongly do not desire*; 2) *do not desire*; 3) *slightly do not desire*; 4) *slightly desire*; 5) *desire*; and 6) *strongly desire*. Therefore, the mean score of 5.18 from the 92 administrators clearly support that school-based administrators *desire* to have more authority in the budget-building process that currently does not empower them to make budget spending decisions.

Table 3
Administrators' Desire to Have More Authority over Budget-Building and Spending

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
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<td>Item 13: ...should be a matter of adopting a set of ideas rather than a set of numbers.</td>
<td>92</td>
<td>5.36</td>
<td>.83</td>
</tr>
<tr>
<td>Item 20: Data from student assessment systems should be used extensively...</td>
<td>92</td>
<td>5.12</td>
<td>.89</td>
</tr>
<tr>
<td>Item 21: The curriculum revision process... should be aligned with budget calendar</td>
<td>92</td>
<td>5.29</td>
<td>.83</td>
</tr>
<tr>
<td>Item 22: Data from the HR office concerning staffing needs should be considered...</td>
<td>92</td>
<td>4.57</td>
<td>1.36</td>
</tr>
<tr>
<td>Item 23: The adopted budget document should include the Ministry's philosophy, ...</td>
<td>92</td>
<td>5.28</td>
<td>.72</td>
</tr>
<tr>
<td>Item 24: The...budget document should include language linking programs to funding</td>
<td>92</td>
<td>5.47</td>
<td>.56</td>
</tr>
<tr>
<td>Item 25: ...should outline the connection between school needs and allocation</td>
<td>92</td>
<td>5.48</td>
<td>.52</td>
</tr>
<tr>
<td>Item 29: Budget questions and suggestions should be [considered] for future use...</td>
<td>92</td>
<td>5.26</td>
<td>.53</td>
</tr>
<tr>
<td>Item 30: There should be written guidelines describing how disputes will be settled...</td>
<td>92</td>
<td>5.05</td>
<td>.88</td>
</tr>
<tr>
<td>Item 31: The principal should be the authority in school-based concerns...</td>
<td>92</td>
<td>4.59</td>
<td>1.45</td>
</tr>
<tr>
<td>Item 32: There should be a published timeline established for the introduction of ideas</td>
<td>92</td>
<td>5.33</td>
<td>.52</td>
</tr>
<tr>
<td>Item 36: There should be a systemic assessment program applied...</td>
<td>92</td>
<td>5.36</td>
<td>.59</td>
</tr>
<tr>
<td>Item 39: ...there should be a written policy guiding how amendments...will be made.</td>
<td>92</td>
<td>5.17</td>
<td>.63</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>92</strong></td>
<td><strong>5.18</strong></td>
<td><strong>.79</strong></td>
</tr>
</tbody>
</table>

*Note: The above descriptors of items are abridged from the survey instrument's items.*

Statements 22 and 31 are the only two mean scores below 5.00 and are two of the 10 items with a relatively high standard deviation. Looking at the distribution of responses for the two questionnaire items in Table 4 does not reveal anything alarming. The highest response percentages for both items were Agree, followed by Strongly Agree. Together, the two ranks contain approximately 70% of each item's response.
Table 4

_Distribution of responses for Questionnaire Items 22 and 31_

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. Data from the human resources office concerning staffing needs should be considered in the budget-building process.</td>
<td>.02</td>
<td>.14</td>
<td>.05</td>
<td>.11</td>
<td>.43</td>
<td>.25</td>
</tr>
<tr>
<td>31. The principal should be the authority in school-based concerns such as instruction-non-instruction; classrooms - extra - curriculars; and, building level - central staff needs.</td>
<td>.08</td>
<td>.07</td>
<td>.03</td>
<td>.10</td>
<td>.45</td>
<td>.27</td>
</tr>
</tbody>
</table>

**Research Question 3: To what extent do school-based administrators believe in transparency and stakeholder involvement?**

The 15 transparency questions gauged administrator attitudes/beliefs regarding budget-building openness. Specifically, who, besides the UAE education authorities, should be involved in the development, passage, and implementation of the budget; whether procedures were made available for community awareness and use; and if there should be regular communications for stakeholders to keep track of the budget-building process (see Table 5).

Table 5 shows collectively the mean score of 4.9 from the 92 administrators. The mean score suggest the administrators more than _slightly agree_ and nearly _agree_ that the school budget-building and spending process should be transparent and open to stakeholders.
Table 5

*Administrator Attitudes/Beliefs toward School Budget Transparency and Stakeholder Involvement*

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 12: ...should be largely delegated to the school administrator.</td>
<td>92</td>
<td>4.63</td>
<td>1.42</td>
</tr>
<tr>
<td>Item 14: ...should be totally within the scope of the administration; no community...</td>
<td>92</td>
<td>3.61</td>
<td>1.53</td>
</tr>
<tr>
<td>Item 15: ...create a forum through which ideas can be converted into reality.</td>
<td>92</td>
<td>5.49</td>
<td>.56</td>
</tr>
<tr>
<td>Item 16: Community involvement...should be formalized with written procedures...</td>
<td>92</td>
<td>4.75</td>
<td>1.15</td>
</tr>
<tr>
<td>Item 17: Input from non-administrative sources should be heavily considered...</td>
<td>92</td>
<td>5.36</td>
<td>.56</td>
</tr>
<tr>
<td>Item 18: Access...should be extended to all interested parties.</td>
<td>92</td>
<td>5.14</td>
<td>.93</td>
</tr>
<tr>
<td>Item 19: Non-employee participants...should represent the diversity of the community</td>
<td>92</td>
<td>4.60</td>
<td>1.19</td>
</tr>
<tr>
<td>Item 26: Roles...should be available in writing and published for staff and community</td>
<td>92</td>
<td>5.41</td>
<td>.65</td>
</tr>
<tr>
<td>Item 27: The adopted budget document should be available to any interested citizen.</td>
<td>92</td>
<td>4.63</td>
<td>1.22</td>
</tr>
<tr>
<td>Item 28: There should be an appeal process established...</td>
<td>92</td>
<td>4.98</td>
<td>.90</td>
</tr>
<tr>
<td>Item 33: A draft of the proposed budget should be placed on public display first...</td>
<td>92</td>
<td>4.83</td>
<td>1.04</td>
</tr>
<tr>
<td>Item 34: Principals should be required to...discuss budgetary matters with their staffs.</td>
<td>92</td>
<td>5.39</td>
<td>.61</td>
</tr>
<tr>
<td>Item 35: There should be incentives in place to reward innovative suggestion...</td>
<td>92</td>
<td>5.30</td>
<td>.55</td>
</tr>
<tr>
<td>Item 37: Directives given to external auditors should be published and available...</td>
<td>92</td>
<td>4.76</td>
<td>1.26</td>
</tr>
<tr>
<td>Item 38: A budget adoption calendar...should be published and distributed ...</td>
<td>92</td>
<td>4.83</td>
<td>1.09</td>
</tr>
</tbody>
</table>

**Note:** The above descriptors of items are abridged from the survey instrument's items.

Even with its modified coding to adjust the consistent direction of responses, statement 14 has a mean score of 3.61; the only mean score below 4.00. As it is barely greater than the mean value on the rating scale of 3.50, the result indicates that collectively administrators *slightly agree* that the budget-building process should not be totally within the scope of the administration and community input is needed.

The remaining 8 statements, with an above 1.0 standard deviation appear in this category and also have the lowest mean scores in the category. The distribution of responses to the 8 questionnaire statements appear in Table 6 and led to an interesting discovery. Surprisingly, the
distribution of responses for item 14 is almost equally divided between agree (51%) and disagree (49%) signifying administrators have relatively competing views regarding community input.

Table 6

Distribution of Responses for Questionnaire Items 12, 14, 16, 19, 27, 33, 37, and 38

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>.03</td>
<td>.09</td>
<td>.03</td>
<td>.20</td>
<td>.32</td>
<td>.33</td>
</tr>
<tr>
<td>14.</td>
<td>.10</td>
<td>.17</td>
<td>.22</td>
<td>.14</td>
<td>.27</td>
<td>.10</td>
</tr>
<tr>
<td>16.</td>
<td>.02</td>
<td>.07</td>
<td>.07</td>
<td>.12</td>
<td>.50</td>
<td>.24</td>
</tr>
<tr>
<td>19.</td>
<td>.02</td>
<td>.05</td>
<td>.08</td>
<td>.21</td>
<td>.43</td>
<td>.21</td>
</tr>
<tr>
<td>27.</td>
<td>.01</td>
<td>.10</td>
<td>.04</td>
<td>.16</td>
<td>.47</td>
<td>.22</td>
</tr>
<tr>
<td>33.</td>
<td>.00</td>
<td>.07</td>
<td>.03</td>
<td>.15</td>
<td>.51</td>
<td>.24</td>
</tr>
<tr>
<td>37.</td>
<td>.01</td>
<td>.11</td>
<td>.02</td>
<td>.11</td>
<td>.47</td>
<td>.28</td>
</tr>
<tr>
<td>38.</td>
<td>.00</td>
<td>.07</td>
<td>.04</td>
<td>.16</td>
<td>.46</td>
<td>.27</td>
</tr>
</tbody>
</table>

Note: Item 14 shows the distribution of revised coding results.
Research Question 4: To what extent do administrators' background characteristics affect budget-building attitudes and beliefs?

Presented in Table 7 are descriptive statistics of the administrators' self-report of their attitudes toward communication management strategies, openness/transparency, and if they acquired their budget-building beliefs on-the-job. The data are somewhat robust due to the number of variables. Noticeable differences are apparent throughout the data. However, the impact of the differences cannot visually be determined.
Table 7
Descriptive Statistics of Background Information with Communication Management Strategies, Transparency, and On-the-Job Training of School Budget-Building

<table>
<thead>
<tr>
<th>Administrator Background Characteristics</th>
<th>Management M (SD)</th>
<th>Transparency M (SD)</th>
<th>OTJ Training M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (n = 25)</td>
<td>5.35 (0.46)</td>
<td>5.02 (0.55)</td>
<td>4.64 (1.25)</td>
</tr>
<tr>
<td>Female (n = 67)</td>
<td>5.12 (0.42)</td>
<td>4.85 (0.42)</td>
<td>4.15 (1.43)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 - 25 (n = 02)</td>
<td>5.50 (0.60)</td>
<td>5.17 (0.52)</td>
<td>5.50 (0.71)</td>
</tr>
<tr>
<td>26 - 30 (n = 05)</td>
<td>5.35 (0.54)</td>
<td>5.31 (0.48)</td>
<td>3.60 (1.67)</td>
</tr>
<tr>
<td>31 - 40 (n = 21)</td>
<td>5.22 (0.41)</td>
<td>4.93 (0.38)</td>
<td>4.33 (1.56)</td>
</tr>
<tr>
<td>41 - 50 (n = 53)</td>
<td>5.11 (0.44)</td>
<td>4.82 (0.46)</td>
<td>4.28 (1.39)</td>
</tr>
<tr>
<td>≥ 51 (n = 11)</td>
<td>5.29 (0.39)</td>
<td>4.99 (0.56)</td>
<td>4.27 (1.27)</td>
</tr>
<tr>
<td>Years of Teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 3 (n = 3)</td>
<td>5.23 (0.63)</td>
<td>4.96 (0.52)</td>
<td>4.00 (2.65)</td>
</tr>
<tr>
<td>4 - 6 (n = 4)</td>
<td>5.10 (0.47)</td>
<td>5.20 (0.47)</td>
<td>4.25 (0.98)</td>
</tr>
<tr>
<td>7 - 10 (n = 5)</td>
<td>5.06 (1.67)</td>
<td>4.88 (0.11)</td>
<td>4.80 (0.45)</td>
</tr>
<tr>
<td>&gt; 10 (n = 80)</td>
<td>5.19 (0.48)</td>
<td>4.88 (0.48)</td>
<td>4.26 (1.44)</td>
</tr>
<tr>
<td>UAE Citizen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes (n = 87)</td>
<td>5.17 (0.44)</td>
<td>5.17 (0.44)</td>
<td>4.28 (1.42)</td>
</tr>
<tr>
<td>No (n = 5)</td>
<td>5.42 (0.41)</td>
<td>5.01 (0.29)</td>
<td>4.80 (1.30)</td>
</tr>
<tr>
<td>Highest Degree Completed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate's (n = 1)</td>
<td>4.85 (NA)</td>
<td>4.80 (NA)</td>
<td>4.00 (NA)</td>
</tr>
<tr>
<td>Bachelor's (n = 74)</td>
<td>5.18 (0.45)</td>
<td>4.88 (0.50)</td>
<td>4.27 (1.44)</td>
</tr>
<tr>
<td>Master's (n = 13)</td>
<td>5.32 (0.41)</td>
<td>4.96 (0.30)</td>
<td>4.31 (1.50)</td>
</tr>
<tr>
<td>Doctoral (n = 4)</td>
<td>5.33 (0.41)</td>
<td>5.05 (0.32)</td>
<td>4.50 (1.30)</td>
</tr>
<tr>
<td>Years in Current Position</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 3 (n = 14)</td>
<td>5.21 (0.46)</td>
<td>4.87 (0.39)</td>
<td>4.29 (1.94)</td>
</tr>
<tr>
<td>4 - 6 (n = 12)</td>
<td>4.99 (0.39)</td>
<td>4.84 (0.23)</td>
<td>4.17 (1.40)</td>
</tr>
<tr>
<td>7 - 10 (n = 19)</td>
<td>5.24 (0.36)</td>
<td>4.86 (0.45)</td>
<td>4.32 (1.25)</td>
</tr>
<tr>
<td>&gt; 10 (n = 47)</td>
<td>5.19 (0.47)</td>
<td>4.94 (0.54)</td>
<td>4.30 (1.35)</td>
</tr>
<tr>
<td>Years as a Public School Administrator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 3 (n = 9)</td>
<td>5.08 (0.44)</td>
<td>4.96 (0.39)</td>
<td>3.67 (1.94)</td>
</tr>
<tr>
<td>4 - 6 (n = 9)</td>
<td>5.25 (0.31)</td>
<td>5.07 (0.48)</td>
<td>4.89 (0.60)</td>
</tr>
<tr>
<td>7 - 10 (n = 19)</td>
<td>5.17 (0.39)</td>
<td>4.80 (0.33)</td>
<td>4.21 (1.48)</td>
</tr>
<tr>
<td>&gt; 10 (n = 55)</td>
<td>5.19 (0.48)</td>
<td>4.90 (0.51)</td>
<td>4.31 (1.39)</td>
</tr>
<tr>
<td>Decentralized Mgmt. Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes (n = 58)</td>
<td>5.18 (0.48)</td>
<td>4.89 (0.47)</td>
<td>4.41 (1.40)</td>
</tr>
<tr>
<td>No (n = 34)</td>
<td>5.17 (0.44)</td>
<td>4.92 (0.45)</td>
<td>4.06 (1.43)</td>
</tr>
</tbody>
</table>
The mean scores are not able to assess the extent the administrators' background characteristics affect budget-building attitudes and beliefs. Therefore, a factorial analysis of variance test (ANOVA) was performed. ANOVA is an inferential statistical test to see if each of the independent variables have an effect on the dependent variables of communication management strategy, openness in the budget-building process, and on-the-job budget training. The results are shown in Table 8.

The level of significance for analysis is $\alpha = .05$. The results of the ANOVA shows that Gender and Age are the two independent variables having a significant difference in attitudes concerning the Communication Management Strategy construct; $p = .043$ and $p = .025$ respectively. Therefore, we conclude Gender and Age are two administrator background characteristics that have a significant effect on attitudes and beliefs concerning Communication Management Strategies. More specific, younger male administrators agree stronger than others regarding the attitudes of this construct.
Table 8

Tests of Between-Variable Effects with Independent Variables One through Nine

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Transparency</td>
<td>1</td>
<td>.329</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>1</td>
<td>.043</td>
</tr>
<tr>
<td></td>
<td>OTJ Training</td>
<td>1</td>
<td>.315</td>
</tr>
<tr>
<td>Age</td>
<td>Transparency</td>
<td>4</td>
<td>.184</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>4</td>
<td>.025</td>
</tr>
<tr>
<td></td>
<td>OTJ Training</td>
<td>4</td>
<td>.085</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>Transparency</td>
<td>3</td>
<td>.532</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>3</td>
<td>.367</td>
</tr>
<tr>
<td></td>
<td>OTJ Training</td>
<td>3</td>
<td>.069</td>
</tr>
<tr>
<td>UAE Citizen</td>
<td>Transparency</td>
<td>1</td>
<td>.925</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>1</td>
<td>.396</td>
</tr>
<tr>
<td></td>
<td>OTJ Training</td>
<td>1</td>
<td>.807</td>
</tr>
<tr>
<td>Degree Completed</td>
<td>Transparency</td>
<td>3</td>
<td>.796</td>
</tr>
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<td></td>
<td>Management</td>
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<td>.972</td>
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<tr>
<td></td>
<td>OTJ Training</td>
<td>3</td>
<td>.711</td>
</tr>
<tr>
<td>Position Title</td>
<td>Transparency</td>
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<td>.937</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>1</td>
<td>.418</td>
</tr>
<tr>
<td></td>
<td>OTJ Training</td>
<td>1</td>
<td>.155</td>
</tr>
<tr>
<td>Length in Current Position</td>
<td>Transparency</td>
<td>3</td>
<td>.653</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>3</td>
<td>.122</td>
</tr>
<tr>
<td></td>
<td>OTJ Training</td>
<td>3</td>
<td>.758</td>
</tr>
<tr>
<td>Length as Public School Administrator</td>
<td>Transparency</td>
<td>3</td>
<td>.749</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>3</td>
<td>.860</td>
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<td></td>
<td>OTJ Training</td>
<td>3</td>
<td>.192</td>
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<td>Experience with Decentralization</td>
<td>Transparency</td>
<td>1</td>
<td>.583</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>1</td>
<td>.721</td>
</tr>
<tr>
<td></td>
<td>OTJ Training</td>
<td>1</td>
<td>.210</td>
</tr>
</tbody>
</table>
Research Question 5: Are administrator attitudes concerning budget-building different according to school grade level?

Presented in Table 9 are descriptive statistics of the administrators' self-report of their attitudes toward budget-building according to school grade level. Noticeable differences among the three constructs are apparent. However, the impact of the differences cannot visually be determined. The mean scores are not able to assess a statistically significant difference in attitudes according to school grade level. Therefore, a factorial analysis of variance test (ANOVA) was performed.

Table 9

Descriptive Statistics of Grade Levels with Communication Management Strategies, Transparency, and On-the-Job Training of School Budget-Building

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Management M (SD)</th>
<th>Transparency M (SD)</th>
<th>OTJ Training M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1, K2 (n = 20)</td>
<td>5.08 (0.44)</td>
<td>4.79 (0.42)</td>
<td>3.85 (1.73)</td>
</tr>
<tr>
<td>Elementary (n = 19)</td>
<td>4.94 (0.33)</td>
<td>4.73 (0.31)</td>
<td>4.37 (1.34)</td>
</tr>
<tr>
<td>Middle (n = 19)</td>
<td>5.48 (0.41)</td>
<td>5.28 (0.50)</td>
<td>4.00 (1.73)</td>
</tr>
<tr>
<td>High School (n = 17)</td>
<td>5.18 (0.41)</td>
<td>4.81 (0.54)</td>
<td>4.88 (0.78)</td>
</tr>
<tr>
<td>Combined (n = 17)</td>
<td>5.23 (0.43)</td>
<td>4.88 (0.42)</td>
<td>4.41 (1.06)</td>
</tr>
</tbody>
</table>

The level of significance for analysis is $\alpha = .05$. The results of the ANOVA in Table 10 shows the School Grade Level independent variable has a significant difference in attitudes concerning the Communication Management Strategy and Transparency constructs; $p = .004$ for both. Therefore, we conclude administrator attitudes toward Transparency and Communication Management Strategy are different according to School Grade Levels. More specific, administrators of Middle Schools agree stronger than others regarding the behaviors of the two constructs.
Table 10

Tests of Between-Variable Effects with Grade Level Variables

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Grade Level</td>
<td>Transparency</td>
<td>4</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>4</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>OTJ Training</td>
<td>4</td>
<td>.667</td>
</tr>
</tbody>
</table>

Research Question 6: Are administrator attitudes concerning budget-building different according to school enrollment size?

Presented in Table 11 are descriptive statistics of the administrators' self-report of their attitudes toward budget-building according to school enrollment size. Noticeable differences among the three constructs are apparent. However, the impact of the differences cannot visually be determined. The mean scores are not able to assess a statistically significant difference in attitudes according to school enrollment size. Therefore, a factorial analysis of variance test (ANOVA) was performed.

Table 11

Descriptive Statistics of School Enrollment with Communication Management Strategies, Transparency, and On-the-Job Training of School Budget-Building

<table>
<thead>
<tr>
<th>School Enrollment Size</th>
<th>Management M (SD)</th>
<th>Transparency M (SD)</th>
<th>OTJ Training M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 100 (n = 3)</td>
<td>4.79 (0.27)</td>
<td>4.93 (0.23)</td>
<td>3.33 (1.53)</td>
</tr>
<tr>
<td>101 - 400 (n = 46)</td>
<td>5.12 (0.43)</td>
<td>4.83 (0.43)</td>
<td>4.28 (1.43)</td>
</tr>
<tr>
<td>401 - 700 (n = 39)</td>
<td>5.25 (0.48)</td>
<td>4.94 (0.53)</td>
<td>4.28 (1.45)</td>
</tr>
<tr>
<td>701 - 1000 (n = 4)</td>
<td>5.44 (0.37)</td>
<td>5.18 (0.25)</td>
<td>5.00 (0.83)</td>
</tr>
<tr>
<td>&gt; 1000 (n = 0)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
The level of significance for analysis is \( \alpha = .05 \). The results of the ANOVA in Table 12 shows the Number of Students Enrolled in School independent variable has no significant difference in attitudes concerning the three constructs. Therefore, we conclude administrator attitudes are not statistically different according to the Number of Students Enrolled in School (i.e. school size). Although we can see a noticeable difference in the Management of Communication Strategies mean scores between administrators of the largest and smallest schools (refer to Table 11), the sample sizes are too small to make reasonable assumptions.

Table 12

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students Enrolled in School</td>
<td>Transparency</td>
<td>3</td>
<td>.350</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>3</td>
<td>.125</td>
</tr>
<tr>
<td></td>
<td>OTJ Training</td>
<td>3</td>
<td>.724</td>
</tr>
</tbody>
</table>

Summary of Results

The results of the study show that administrators are dissatisfied with the current centralized budget-building process which excludes their input. Consequently, the administrators desire to have more influence in the budget-building process. Collectively, the administrators agree that the budget-building process should be transparent and open to stakeholders including school teachers and staff, parents, students, and community supporters to name a few. Although administrators believe that community members should have access to the budget-building process, they only slightly agree that community input is actually needed.

The results of the study show that gender and age are the two administrator background characteristics that are significant variables that seem to have an effect on the budget-building
attitudes and beliefs concerning communication management strategies. Specifically, younger aged male administrators agree stronger than female administrators and older males regarding the attitudes associated with communication management strategies. However, there are no significant differences among background characteristics regarding any of the types of attitudes associated with transparency/openness, and on-the-job training.

The results of the study show that school grade level is a school demographic characteristic that is a significant variable that seem to have an effect on the budget-building attitudes and beliefs concerning transparency and communication management strategies. Specifically, administrators of middle school grades agree stronger than other school grade levels regarding the attitudes associated with transparency and communication management strategies. However, there are no significant differences among the school size (student enrollment) regarding any types of administrator attitudes within the three constructs. Thus, we cannot conclude that administrators believe differently according to how large or small the school is.

There is no clear agreement where the participants learned their current set of budget-building strategies. The mean scores for the On-the-Job Training (OTJ) construct vary and the standard deviations are above 1.0. This suggests little relationship between administrators' background and school demographics, and their professional preparation for budget-building. These data further suggest that the responding administrators have acquired budget-building knowledge from a variety of experiences.
Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study is to investigate K-12 public school administrators' attitudes and beliefs toward the public school budget-building process in the UAE, specifically in Al-Ain city of Abu Dhabi. This quantitative study examines the relationship between administrators' attitudes and adopted beliefs about school budget-building and administrator characteristics. Specifically, this study investigates if school administrators' backgrounds have an effect on administrators' attitudes and beliefs about decentralized school budget-building in the UAE. The study is suggestive and hopes to have influence on budget-building policy and reform.

Discussion

A key underlying belief is that site-based administrators in the UAE public schools would like to be involved in the budget-building process and have more input in school spending. Customarily, the UAE is a centralized government and the education sector is a branch of the government. Therefore, all matters involving education policies and procedures (including budget related matters) flow from the top, down to the school level. School-based administrators are not empowered to allocate funds according to school needs when necessary. The study anticipated that school-based administrators would prefer a more decentralized education sector that empowered them with school finance decision making capacity to be more effective school leaders.

An essential belief is that school-based administrators play a crucial role in the organization of a school. Certainly, administrators have positional ability to access the power domains of the UAE’s government education sector, school staff, teachers, parents, and
community stakeholders. The degree to which school-based administrators make their budget-building strategies transparent to their communities is a core component of this study.

An online web surveyor was used to disseminate a survey instrument to participants volunteering to respond to the study. The survey instrument grew out of the combination of actual experiences, available literature, and an existing U.S. based study that was conceptually similar. The survey was designed around attitudes and beliefs of school finance which confront principals and school management. The survey instrument utilized in this study contained two sections. The first section included independent variables of administrator background and school demographic information containing 11 items. And the second section (dependent variables) of the questionnaire involved a *scale of administrators' attitudes toward school budget-building in the UAE* containing 29 items designed to solicit responses on a six-point continuum of attitudes toward the school budget-building process, from strongly disagree to strongly agree. The dependent variables described the actions used in creating and implementing budgets in a decentralized, inclusive budget-building process. Responses from 92 public school principals and vice principals (i.e. administrators), who completed the survey in its entirety, were analyzed using Microsoft Excel and Statistical Package for Social Sciences (SPSS).

The conceptual framework helped put forward the independent and dependent variable sets for data analyses. A focus of the study was on identifying relationships between the openness and communication-management processes of administrators and their background, and school demographics.
Interpretation of Each Result

The lack of sufficient financial resources or appropriate school budget spending is often cited as relevant contributors to student success. The study utilized factors of school-based administration or decentralized approaches to budget-building and spending as the main variables for the purpose of assessing attitudes and beliefs of administrators. The literature and personal experiences of the researcher indicated that public school administrators, in general, feel the need for an inclusive school budget-building and spending that will accommodate their suggestions for school improvement, which will increase stakeholder support and ultimately student performance.

Administrators scored consistently above slightly agree through agree (from 4.57 through 5.49 out of 6.00) rank, with the one exception. Responses to Item 14 averaged slightly disagree (M = 3.61). The original working of this question required a reversal of the participants' responses to be compatible with the other items in the survey. Even with the changes in coding, Item 14 remained the lowest score of the survey. As observed by the distribution of scores, administrators have noticeably varying attitudes and beliefs regarding the necessity of community input.

Although none of the descriptive attitudes and beliefs scored near the high rank of 6.00, the consistent mean scores above 4.50 and the overall mean score above 5.00 provide sufficient evidence to conclude that school-based administrators are dissatisfied with the current UAE budget-building process. The mean scores for the two constructs also indicates that administrators agree they should have more authority in the budget building process by managing communications regarding the budget; and they also agree the budget should be transparent and include stakeholders’ involvement.

There are four items with mean scores of 5.40 or higher (see Table 13). Items 15 and 26 are in the openness/transparency construct. This construct indicates the degree in which
administrators are willing to share budget related information and to whom they feel should be included in the process. Items 24 and 25 are in the communication management strategy construct. This construct represents the authority to determine who is informed and involved in budget related matters.

Table 13

*Questionnaire Items Having the Highest Mean Scores.*

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 15. The budget-building process should create a forum through which ideas can be converted into reality.</td>
<td>92</td>
<td>5.49</td>
<td>.56</td>
</tr>
<tr>
<td>Item 24. The adopted budget document should include language linking programs to funding.</td>
<td>92</td>
<td>5.47</td>
<td>.56</td>
</tr>
<tr>
<td>Item 25. The adopted budget document should outline the connection between school needs and resource allocation.</td>
<td>92</td>
<td>5.48</td>
<td>.52</td>
</tr>
<tr>
<td>Item 26. Roles and responsibilities of administrators, staff, and the Ministry of Education members in the budget-building and budget-adoption processes should be available in writing and published for staff and community.</td>
<td>92</td>
<td>5.41</td>
<td>.65</td>
</tr>
</tbody>
</table>

The relevance of the two highest mean scores is particularly of interest. The two main areas of concern by administrators in the UAE according to the literature and the researcher's experiences are 1) inclusiveness; and 2) autonomy to use the budget to address school needs when appropriate. The two highest mean scores concur with the two main areas of concern.

Gender and age are the only two administrator background characteristics that showed statistical significance. Both characteristics showed levels of significance in the Communication Management construct. Although men and women responded statistically different in this construct, there are no reasonable explanations we can offer to support this difference. The 13
items of this construct appear to be gender neutral. It is not obvious why men ranked statistically higher than women, $M = 5.35$ to $M = 5.12$ respectively.

The descriptive statistics of age, as shown in Table 14, reveals an interesting pattern. The highest two means represent the youngest and second youngest age groups in that order. The third highest mean represents the oldest age group, followed by the 31 - 40 and 41 - 50 age groups respectively. Although inconclusive, a hypothesis is suggested for this phenomenon. Younger administrators are most likely more influenced by their academic preparation. On-the-job experiences have not rivaled classroom-based knowledge at this stage in a young administrator's career. Therefore, young administrators are more idealistic of what they can accomplish as a school Principal/Vice Principal. This implies that as administrators gain practical experiences on-the-job, the theory-based approaches are challenged by a number of realities or perceived realities that rival academic preparation. Young and new entry administrators may not realize the great burden and accountability for school success at this stage in their careers.

Table 14

*Descriptive Statistics of Age with Communication Management Strategies*

<table>
<thead>
<tr>
<th>Administrator Background Characteristic</th>
<th>Management M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 25 ($n = 02$)</td>
<td>5.50 (0.60)</td>
</tr>
<tr>
<td>26 - 30 ($n = 05$)</td>
<td>5.35 (0.54)</td>
</tr>
<tr>
<td>31 - 40 ($n = 21$)</td>
<td>5.22 (0.41)</td>
</tr>
<tr>
<td>41 - 50 ($n = 53$)</td>
<td>5.11 (0.44)</td>
</tr>
<tr>
<td>$\geq 51$ ($n = 11$)</td>
<td>5.29 (0.39)</td>
</tr>
</tbody>
</table>

We suggest that administrators in these mid-career ages of 31 - 50 have completely become aware of the great burden and accountability for school success. The second lowest mean score of this construct is 4.59 (Item 31), and it directly address the attitude toward the many
responsibilities expected of a school administrator. Item 31 states, "The principal should be the authority in school-based concerns such as instruction-non-instruction; classrooms - extra-curriculars; and, building level - central staff needs." The ages 31-50 represent $n = 74$ or over 80% of the responses, and with this age group's large share of the total participants it influenced the low mean score of item 31 the most.

The mean score of ages 51 and over quite possibly suggests the most senior school administrators have embraced a good blend of theory and practice. Moreover, this age group would have a better acceptance of the expectations placed on them. This would account for the mean score increasing and going against the downward trend. However, this rationale is speculative at best due to the sample size distribution. The youngest two age groups do not have enough participants for a stronger interpretation.

Administrator attitudes toward Transparency and Communication Management Strategy are statistically different according to School Grade Levels. The ranking of mean scores in each construct run parallel. In other words, both constructs shared the same order of highest to lowest mean score: 1. Middle School; 2. Combined (grade levels); 3; High School, 4. K1,K2; and then 4. Elementary (see Table 15). However, the researcher could not find a sound rationale for the mean scores distribution. There is no literature discovered by the researcher that suggests why attitudes toward Middle School budget-building should be statistically different than attitudes toward Elementary School budget-building.

The Number of Students Enrolled in School independent variable has no significant difference in attitudes concerning the three constructs according to the ANOVA test. Therefore, no further interpretation of this result is warranted. Other independent variables such as years of teaching experience, and years as an administrator were not related to budget-building attitudes and beliefs either.
Table 15

Ranking of Grade Level Means with Communication Management Strategies, and Transparency of School Budget-Building

<table>
<thead>
<tr>
<th>School Grade Levels</th>
<th>Grade Level Rank</th>
<th>Management M (SD)</th>
<th>Transparency M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Middle</td>
<td>5.48 (0.41)</td>
<td>5.28 (0.50)</td>
</tr>
<tr>
<td></td>
<td>2. Combined</td>
<td>5.23 (0.43)</td>
<td>4.88 (0.42)</td>
</tr>
<tr>
<td></td>
<td>3. High School</td>
<td>5.18 (0.41)</td>
<td>4.81 (0.54)</td>
</tr>
<tr>
<td></td>
<td>4. K1, K2</td>
<td>5.08 (0.44)</td>
<td>4.79 (0.42)</td>
</tr>
<tr>
<td></td>
<td>5. Elementary</td>
<td>4.94 (0.33)</td>
<td>4.73 (0.31)</td>
</tr>
</tbody>
</table>

The researcher was interested to learn if the administrators' attitudes were formed by on-the-job training. The results indicate that the responding administrators' attitudes were not heavily influenced by their on-the-job training. Therefore, much of their budget-building attitudes were influenced elsewhere. Item 40 of the questionnaire read, "You learned your current set of budget-building strategies from on-the-job training." The mean score for item 40 is 4.28 with a standard deviation of 1.42. The administrators collectively more than slightly agreed with item 40, and the standard deviation suggests the responses are strongly mixed. These data indicate that the responding administrators have devised their methodology for budget-building from a variety of experiences. As demonstrated in Table 16, the budget-building strategies of administrators in this study appear to be more varied than patterned.

Table 16

Distribution of responses for Questionnaire Item 40

<table>
<thead>
<tr>
<th>40. You learned your current set of budget-building strategies from the on-the-job training.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5%</td>
<td>13%</td>
<td>8%</td>
<td>16%</td>
<td>42%</td>
<td>16%</td>
<td>1.42</td>
</tr>
</tbody>
</table>
Faculty development and staff needs were believed to be an important missing budget category for UAE public school administrators. Although not a focus of this study, responses of participants clearly indicate that spending on faculty and staff is not a main concern of UAE public school administrators. Item 22 reads, "Data from the human resources office concerning staffing needs should be considered in the budget-building process." The mean and standard deviation for item 22 are 4.57 and 1.36 respectively. The mean of item 22 is the second lowest scoring item on the survey instrument. Administrators more than *slightly agree*, but less than *agree* with this statement, which is quite unexpected.

**Implications for Future Research**

This study is limited by small representation in several administrator background variables, specifically, participants below the age of 31 and male participants relative to the number of female participants. The small number of respondents with these variables limited the strength of analyses and made some statistical results inconclusive. Future research should consider using cluster sampling and include multiple Emirates to increase the representations as well as the generalizability of the study.

Combined schools are schools that are inclusive of multiple combinations of grade levels (e.g. primary through middle school, or secondary through high school). Combined schools reduced the power of the statistical analyses between schools with clearly defined grade levels. It is unknown if the exclusion of Combined Schools from the study would have produced a different pattern for interpretation.

Budgeting for staff and faculty development was not generally perceived as very important to the participants overall. Perhaps contributing factors are the lack of quantifiable
outcomes supporting the value of faculty and staff development or organizational cultural factors associated with UAE education management. The varying responses in the on-the-job training construct is the most convincing implication for future research investigating the professional preparation and development of UAE public school administrators.

**Recommendations**

On the basis of the findings from this research and the consequent implications, the following recommendations are offered:

1. Although current budget-building and spending decisions are determined by the UAE education sectors of the government, principals and vice-principals are in a position to positively influence the budget-building process. At best, small incremental change is possible, but school-based administrators must have the knowledge, skills, and abilities to make budget decisions if/when given the authority to do so. Future research should be directed at uncovering best practices and testing their applicability to the UAE public school setting.

2. More research is recommended to investigate if male administrators' attitudes and beliefs toward communication management strategies are significantly different than female administrators as this study suggests. If so, what could be the contributing factors to this difference?

3. Future research should also look at student academic achievement of each school and compare if there are any budget related strategies that are different in high achieving schools compared to low achieving schools of equal school grade levels and/or enrollment size.
4. Future research may consider how the age of administrators or their career level affect their attitudes and beliefs toward school budget-building and spending.

The intersection of budget-building strategies and site-based leadership needs to be addressed in scholarly fashion as a combined concept rather than separate entities of school finance and educational leadership. The needs of students and the constraints on available resources will coexist, however the school administrator must create ways by which their school can succeed. They need to be better prepared through the help of improved research-based practices.
REFERENCES


Kimberley, B. (2013). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology*


Appendix A

Survey Instrument*

1. Gender: Male ____ Female ___
2. Age: ______
3. Years of teaching experience:
   (a) 3 years or less;
   (b) 4 to 6 years;
   (c) 7 to 10 years;
   (d) more than 10 years
4. UAE citizen: Yes ____ No ___
5. Highest degree completed:
   (a) Associate's
   (b) Bachelor's
   (c) Master's
   (d) Doctoral
6. Title of your position: ______________________
7. Length of time in current position: _____ years _____ months
8. Length of time as a public school administrator: _____ years _____ months
9. Experience with decentralized management school system? Yes ____ No ___
10. Number of students enrolled at your school:
    (a) less than or equal to 100;
    (b) 101 to 400
    (c) 401 to 700
    (d) 701 to 1000
    (e) greater than 1000
11. Grade levels at current school
    (a) K-1, K-2.
    (b) Elementary School
    (c) Middle School
    (d) High School
    (e) Combined School
## Scale of Administrators' Attitudes toward School Budget-building in the UAE

**Instructions:** For each question, please indicate the extent to which you agree or disagree with the following statements using the following scale:

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Slightly Disagree</td>
<td>Slightly Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>

12. The budget-building process should be largely delegated to the school administrator.  
13. The budget-building process should be a matter of adopting a set of ideas rather than adopting a set of numbers.  
14. The budget-building process should be totally within the scope of the administration and community input is not needed.  
15. The budget-building process should create a forum through which ideas can be converted into reality.  
16. Community involvement in the budget-building process should be formalized with written procedures adopted by the Ministry of Education.  
17. Input from non-administrative source should be heavily considered in eventual budget adoption decisions.  
18. Access to the budget-building process should be extended to all interested parties.  
19. Non-employee participants in the budget-building process should represent the diversity of the community.  
20. Data from student assessment systems should be used extensively in discussions during the budget-building process.  
21. The curriculum revision process calendar should be aligned with the budget adoption calendar.  
22. Data from the human resources office concerning staffing needs should be considered in the budget-building process.  
23. The adopted budget document should include the Ministry's philosophy, vision statement, mission statement, and annual goal statements.  
24. The adopted budget document should include language linking programs to funding.  
25. The adopted budget document should outline the connection between school needs and resource allocation.  
26. Roles and responsibilities of administrators, staff, and the Ministry of Education members in the budget-building and budget-adoption processes should be available in writing and published for staff and community.  
27. The adopted budget document should be available to any interested citizen.  
28. There should be an appeal process established to provide stakeholders access to inquiry concerning budget matters.
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Slightly Disagree</td>
<td>Slightly Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>29.</td>
<td>Questions and suggestions concerning the budget should be analyzed and archived for possible inclusion in future budgets.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30.</td>
<td>There should be written guidelines describing how disputes will be settled during the budget-building process.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31.</td>
<td>The principal should be the authority in school-based concerns such as instruction-non-instruction; classrooms - extra-curriculars; and, building level - central staff needs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32.</td>
<td>There should be a published timeline established for the introduction of new ideas during the budget-building process.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33.</td>
<td>A draft of the proposed budget should be placed on public display for a specified number of days prior to final adoption by the Ministry of Education.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34.</td>
<td>Principals should be required to periodically discuss budgetary matters with their staffs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35.</td>
<td>There should be incentives in place to reward innovative suggestions which enhance resource management.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36.</td>
<td>There should be a systemic assessment program applied to the budget-building and budget-implementation processes to encourage continuous improvement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37.</td>
<td>Directives given to external auditors should be published and available to staff and community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38.</td>
<td>A budget adoption calendar listing the sequence of decision-making dates should be published and distributed to staff and community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>39.</td>
<td>If the principal's administrative budget recommendation is not adopted in total, there should be a written policy guiding how amendments from the Ministry of Education will be made.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>40.</td>
<td>You learned your current set of budget-building strategies from on-the-job training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

*Survey instrument is a modification of questionnaire used in Wang, and Murray (2009)*
Appendix B

Permission Request Letter to the Ministry of Education

I am writing to request permission to conduct research at Pennsylvania State University. I am a graduate student in the field of education and I am interested in studying the impact of technology on student learning. I believe that this research will be beneficial to the Ministry of Education and I hope that you will consider granting me permission to conduct this research.

Sincerely,

[Your Name]
Appendix C

Letter of Permission from the Abu Dhabi Education Council

Date: 5th January 2016
Ref:

To: Public Schools Principals,

Subject: Letter of Permission

Dear Principals,

The Abu Dhabi Education Council would like to express its gratitude for your generous efforts & sincere cooperation in serving our dear students.

You are kindly requested to allow the researcher, Rashid Musalam Al Riyami, to complete his research on:

ATTITUDE OF PUBLIC SCHOOL ADMINISTRATORS’ TOWARD SCHOOL BUDGET IN ABU DHABI, UAE AND SELECTED DEMOGRAPHIC FACTORS

Please indicate your approval of this permission by facilitating his meetings with the sample groups at

[Signature]

Date: 5th January 2016
Appendix D

Invitation to Participate in Study

Dear Participant,

I invite you to participate in a research study entitled “An Investigation of Public School Administrators’ Attitudes That Impact School Budget-Building in UAE”. I am currently enrolled in the Education Leadership Program at Pennsylvania State University State College, PA, USA, and am in the process of writing my (Ph.D. Thesis). The purpose of the research is to examine the relationship between administrators’ attitudes and adopted beliefs about school budget building and their subsequent behaviors as educational leaders.

Your participation in this research project is completely voluntary. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential and anonymous. Data from this research will be kept under lock and key and reported only as a collective combined total. No one other than the researchers will know your individual answers to this questionnaire. If you agree to participate in this project, please answer the questions on the questionnaire as best you can. It should take approximately 7-10 minutes to complete. Please click in the link to start the survey.

This is the Arabic version link
https://www.surveymonkey.com/r/Alriyami

This is the English version link
https://www.surveymonkey.com/r/AlriyamiEnglish

If you have any questions about this project, feel free to contact The Researcher Rashid Alriyami,
Thank you for your assistance in this important endeavor.
Sincerely yours,

Rashid Musallam Alriyami
alriyamirashid@icloud.com
Appendix E

Letter of Appreciation to Participants

Letter of Appreciation

It is with great pleasure that I extend my sincere appreciation for your support of responded to my survey. It was very nice of you to take time out of your day and spend to do that.

I hope the outcome of the survey add to the UAE research center and benefit the educational formulation and implementation of school-based budget policies, and for the design of budget-development reform initiatives and budget-training programs supporting UAE school administrators to be more effective leaders.

Again thank you for your help on the Survey. I appreciate the time you spent with it. It was a privilege to meet you

Sincerely,

Rashid Alriyami
Rashid Musallam Alriyami
446 Blue Course Dr. Apt 608
State College, PA, 16803, United States
+18148837777
alriyamirashid@icloud.com

PROFESSIONAL EXPERIENCE

UAE University Al Ain Abu Dhabi United Arab Emirates
UAEU - Teaching Assistant May 2010 - Present

*On academic leave since obtaining position*

SEHA - Tawam Hospital Al Ain Abu Dhabi United Arab Emirates
Department Head Manager March 2008 - May 2010

- Prepare training budget for department or organization.
- Evaluate instructor performance and the effectiveness of training programs, providing recommendations for improvement.
- Analyze training needs to develop new training programs or modify and improve existing programs.
- Conduct or arrange for ongoing technical training and personal development classes for staff members.
- Plan, develop, and provide training and staff development programs, using knowledge of the effectiveness of methods such as classroom training, demonstrations, on-the-job training, meetings, conferences, and workshops.
- Conduct orientation sessions and arrange on-the-job training for new hires.
- Confer with management and conduct surveys to identify training needs based on projected production processes, changes, and other factors.
- Train instructors and supervisors in techniques and skills for training and dealing with employees.

Ministry of Education Al Ain Abu Dhabi United Arab Emirates
Vice Principal March 2001 - March 2008

- Monitor students' progress, and provide students and teachers with assistance in resolving any problems.
- Confer with parents and staff to discuss educational activities and policies, and students' behavioral or learning problems.
- Set educational standards and goals, and help establish policies, procedures, and programs to carry them out.
- Plan, direct, and monitor instructional methods and content of educational, vocational, or student activity programs.

EDUCATION

Penn State University State College PA United States
- Ph.D - Educational Leadership Candidate, 2012- Present
- Master - Organization Development 2010-2012
- Bachelor - Workforce Education & Development 1998 - 2000
- Associate - Accounting 1996 – 1998