

## **A Structural Model of School Effectiveness of Public Elementary School Administrators in Southern Mindanao, Philippines**

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### **ABSTRACT**

*The study aimed to develop and derive the best fit model of school effectiveness of public elementary schools in Davao Region as basis for a leadership enhancement program. Descriptive, correlational, and causal methods were used to describe the level of the variables, to test whether significant relationship exists between the variables, and to test whether leadership behavior, organizational support and team-building practices predict school effectiveness. Pearson Product Moment Correlation coefficient, multiple linear regression and structural equation modeling (SEM) were used as statistical methods to arrive at the findings and conclusions. Findings revealed that public elementary school administrators are experts in terms of school and instructional leadership. School administrators have agreeable degree of organizational support to their school organizations and they always practice team building in terms of problem-solving, communicating, planning and implementing. The level of public elementary school administrators' effectiveness was excellent. Leadership behavior, organizational support and team building practices of public elementary school administrators significantly correlate with school effectiveness. Leadership behavior, organizational support, and team building practices explained 66 percent of school effectiveness. The best fit model of school effectiveness was that one which surpassed most of the goodness-of-fit indices.*

**Keywords:** *Structural model, school effectiveness, school administrators*

### **INTRODUCTION**

School effectiveness has always been a concern in institutions of learning, especially in basic education. School administrators, teachers and staff as well as students are in continuous search for factors responsible for shaping the effectiveness of the school, naming crucial factors that are considered precursor for it to take place or happen. According to open system views, schools constantly interact with their environments. For a school to continuously exist, it should consider a twofold requirement: that is, ensure that its performance in developing students, teachers and administrators is high, and it should get support from its stakeholders (Caldwell, 2005).

In the Philippines, as stipulated in Republic Act 9155, school heads are empowered and challenged "to be a good leader and school manager." This entails that the principal must provide constructive support and should obtain the resources and materials necessary for teachers to be successful in the classroom, and should be abreast of the latest development in teaching, learning, assessment, motivation, classroom management and assessment (Yap-Aizon, 2010).

The Philippine government has studied the capabilities of the Philippine educational system to deliver quality and globally-competitive education. In the survey on the status of Philippine education, the alarming situation revealed that students have insufficient mastery on school competencies. The National Achievement Test (NAT) for grade 6 School Year 2009-2010 passing rate is only 69.21 percent locally, only 6 out of every 1,000 Grade 6 elementary students are prepared to enter high school. On the other hand, the National Achievement Test for high school is only 46.38 percent in School Year 2009-2010 (The K+12 Basic Education Reform, 2012).

In spite of the government's encouragement for school effectiveness problems in national and local educational sectors have still been observed. To boot further, Section E (10) of Republic Act 9155 emphasizes the need for school heads "to establish school and community networks, encourage the active participation of teacher organizations, non-academic personnel of public schools and parents-teachers-community associations." This implies that school heads and administrators must provide opportunities for collaboration of school's internal and external stakeholders, to develop leadership and shared responsibility for student/pupil outcomes (DepEd-TEEP, 2006), and must instil intensive supervision to achieve higher academic achievement as its instructional functionality (Quirog, 2006). Also, the Basic Education Sector Reform Agenda (BESRA) laid down its key reform thrusts, one of which is to get all schools to continuously improve (Luistro, 2012). This necessitates that for schools to improve more, school-based management criteria must be met and school Maintenance and Other Operating Expenses (MOOE) must be well-managed, among others, which pose challenges for school administrators.

With all of these scenarios, the researcher finds it appropriate to model out school effectiveness of public elementary school administrators, involving factors, i.e. school administrators' leadership behaviour, organizational support and team building practices, which will become a basis in the formulation of a suitable enhancement program to address the problems mentioned. Thus, the researcher ardently channels interest in developing a model of school effectiveness in public elementary school system and this study was conceived.

#### *Statement of the Problem*

This study determined the best fit model for school effectiveness of public elementary schools in Davao Region as basis for leadership enhancement program. Specifically, it sought answers to the following questions:

1. What is the level of leadership behavior of administrators in terms of:
  - 1.1 school leadership; and
  - 1.2 instructional leadership?
2. What is the level of organizational support of administrators?
3. What is the level of team building practices in terms of:
  - 3.1 problem-solving;
  - 3.2 communicating;
  - 3.3 planning; and
  - 3.4 implementing?
4. What is the level of school effectiveness in terms of:
  - 4.1 competencies in improving staff support services;
  - 4.2 competencies in improving student personnel services;
  - 4.3 school support by community; and
  - 4.4 school support by parents?
5. Is there a significant relationship between:
  - 5.1 leadership behavior and school effectiveness;
  - 5.2 organizational support and school effectiveness; and
  - 5.3 team-building practices school effectiveness?
6. Do leadership behavior, organizational support, and team building practices significantly predict school effectiveness?
7. What model best fit school effectiveness of public elementary school administrators in Davao Region?

### *Hypotheses*

The following hypotheses were tested at 0.05 level:

*Ho1* There is no significant relationship between leadership behavior and school effectiveness, organizational support and school effectiveness, and team-building practices and school effectiveness.

*Ho2* Leadership behavior, organizational support, and team building practices do not significantly predict school effectiveness.

*Ho3* There is no model that best fit school effectiveness of public elementary school administrators in Davao Region.

### **FRAMEWORK**

This study was hinged on various theories that stressed the importance of leadership, organizational support and team building practices towards school effectiveness:

A framework for strategic leadership developed by Davies (2006) was able to establish a list of significant characteristics that successful strategic educational leaders possessed. These were (a) a dissatisfaction or restlessness with the present; (b) the ability to prioritize their own strategic thinking and learning; (c) the ability to create mental models to frame their own understanding and practice; and (d) powerful personal and professional networks (Davies, 2006). The framework demarcates that dissatisfaction and restlessness were born out of the organizational reality of schools and the need for capacity and capability building prior to changing the current situation. Many school leaders stressed the importance of new knowledge to effectively promote the strategic direction of their respective educational institutions. This knowledge led to the construction of mental models and frameworks that school leaders use to guide their own practice and understanding. As with strategic leadership characteristics, the findings were able to create a list of five key activities that strategic leaders involve themselves in. They are (a) direction setting; (b) translating strategy into action; (c) enabling the staff to develop and deliver the strategy; (d) determining effective intervention points; and (e) developing strategic capabilities (Davies, 2006).

In the perspective of leadership behaviour, Starrat (2004) emphasizes that leadership is basically concerned with the cultivation of an environment that supports participation, sharing of ideas, and the virtues of honesty, openness, flexibility, and compassion. Likewise, he argues that the educational leader nurtures a sense of community in an environment characterized by a democratic way of life, a democratic process of learning, a democratic participation in the life of the community of the school.

In the perspective of team building practices, Hellreigel and Slocum (1983) verbalized that team-building is an organizational change by which members diagnose and plan changes to improve effectiveness. This was affirmed by Newstrom and Davis (2002), further emphasizing that team members must work together to be more effective and members are encourage to examine how they work together, identify their weaknesses and develop more strategies to obtain the organizational goals which specify the role of the public elementary school administrators in their team-building practices.

In the aspect of organizational support theory, Rhoades and Eisenberger (2002) proposed that when employees believe that their organizations value their contributions and care about their well-being, they may reciprocate such perceived support with increased commitment, loyalty, and performance.

In the perspective of school effectiveness, Weber (1971) proposes that successful schools are led by administrators characterized with strong administrative leadership, high expectations for student achievement, instilling positive school atmosphere a sense of order, purpose, and a pleasure in learning, with strong emphasis on reading; individualization of instruction and do regular evaluation of pupil progress. These were amalgamated by Edmonds (1979), summarizing that the most important characteristics of effective school administrators are: (1) strong administrative leadership; (2) high expectation for learning; (3) a conducive environment; (4) a focus on basic skills; (5) an efficient use of resources; and (6) frequent monitoring of pupil progress. Also, Barth (1990) has said that “to improve a school, it is necessary to enlarge its four walls by involving the teachers, parents and principals in the accomplishment of its mission, vision and goals.” Finally, Gibson and colleagues (1965) agreed to this, explaining that organizational effectiveness depends on the productivity of the people working within the team.

The schematic diagram in Figure 1 shows the interrelationship of the variables in this study. The first box at the left present the exogenous variables composed of leadership behavior, organizational support and team building practices. While the second box at the right is the endogenous variable consisting school effectiveness of public elementary schools in Davao Region.

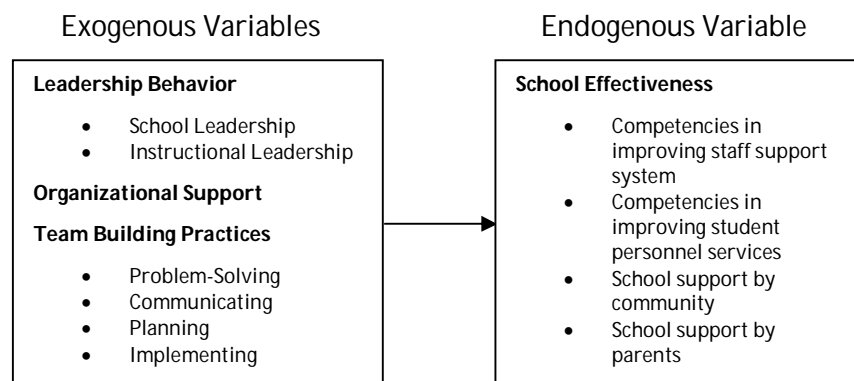


Figure 1. Conceptual Framework Showing the Relationship of the Variables of the Study

It is conceptualized in this study that when public elementary school administrators in the whole Davao Region are experts in school leadership and instructional leadership, have agreeable degree of organizational support to their school organizations and always practice team building then effectiveness of the schools they manage would follow.

## METHODS

### *Research Design*

This study utilized quantitative research design which refers to the plan or strategy of shaping the research (Henn & Madow, 2006) that might include the entire process from conceptualizing a problem to writing a research questions, and on to data collection, analysis, interpretation and report writing (Creswell, 2002) and used to develop and employ of mathematical models, theories and/or hypotheses pertaining to phenomena (Given, 2008). The researcher employed the correlational design to describe the statistical association between two or more variables (Creswell, 2002).

In context, this research examined the interrelationship of leadership behavior, organizational support, and team-building practices towards school effectiveness.

Further, the researcher utilized descriptive-causal design as method of the study. Descriptive method of research is concerned with the procedures used to organize, describe and summarize data, while causal method using nomothetic causal explanation pertains to the belief that variation in an independent variable will be followed by variation in the dependent variable, *ceteris paribus*, or when all other things are equal (Cherry, 2010).

*Respondents and Sampling*

The study was conducted during SY 2013-2104 in Davao Region, located on the southeastern portion of Mindanao. Davao Region consists of four provinces namely: Davao del Sur, Davao del Norte, Davao Oriental and Compostela Valley and six cities namely: Davao, Panabo, Tagum, Island Garden City of Samal, Digos, and Mati. There are a total of 1,504 public elementary schools with 19,364 teachers in the entire Davao Region.

The research respondents are the public elementary school teachers in the ten (10) divisions in Davao Region. The teachers were selected using purposive sampling technique. A total of 500 public elementary school teachers were expected to participate in the study, anchoring on Kenny's (2003) suggestion that sample size of a SEM research must be at least 200. Equal number of teachers was taken from the four (4) provinces for evenness. To screen the evaluators for a much-reliable data-gathering, only those teachers with a permanent position and at least five years of length of service were selected as participants of the study. Of the five hundred (500) questionnaires handed to the teachers who took part of the study, 467 were returned; a 93.4 percent response rate and all were validly answered.

*Research Instrument*

The scales used in Leadership Behavior Competency Leadership Domains were taken from the original instrument developed by the National Competency-Based Teacher Standards (NCBTS) Assessment Tool for Teachers. This instrument contains items which describes a specific way in which a school leader may behave. The participants would indicate the frequency with which he/she perceived the leader to engage in each type of behavior namely, School Leadership and Instructional Leadership. Fifty teachers (50) from Apolinar Franco Sr. and Tagabuli Elementary Schools in Santa Cruz South District responded on the scales to test its reliability. The estimated reliability by the Cronbach's alpha method was 0.942 for the School Leadership scale scores and 0.962 for the Instructional Leadership Scale. Scores were interpreted using a 4-point scale.

Mean Interval	Descriptive Level	Descriptive Interpretation
3.26 - 4.00	Very High	The school administrator does the task very well
2.51 - 3.25	High	The school administrator does the task, but needs to learn more
1.76 - 2.50	Moderate	The school administrator is still learning to do the task
1.00 - 1.75	Low	The school administrator is not capable of doing the task

The Organizational Support Scale, developed by Rhoades and Eisenberger (2002), was adapted to measure organizational support as perceived by public elementary school administrators. Fifty teachers (50) from Apolinar Franco Sr. and Tagabuli Elementary Schools in Santa Cruz South District responded on the scales to test its reliability. Cronbach's alpha test was carried out and the scale was found out to have a reliability coefficient value of .781. The scores were interpreted using a 4-point scale, different from the 5-point scale originally used.

Mean Interval	Descriptive Level	Descriptive Interpretation
3.26 - 4.00	Very High	The situation is strongly evident in the school administrator.
2.51 - 3.25	High	The situation is evident in the school administrator in most cases.
1.76 - 2.50	Moderate	The situation is occasionally evident in the school administrator.
1.00 - 1.75	Low	The school administrator is not doing or has not yet done the situation.

The questionnaire that focused on the level of the team-building practices of school administrators in terms of problem-solving, planning, communicating, and implementing was

adopted from the study of Patino-Lico (2008). The instrument originally used a 5-point Likert scale with a reliability coefficient of .876. In this study, the Likert rating scale from one to four (1-4) was utilized to indicate the conditions and provisions of the particular criteria or item. A Cronbach's alpha reliability test was carried out by the researcher involving the same fifty teachers from Apolinar Franco Sr. and Tagabuli Elementary Schools and found out that the measure has an alpha value of .985. A rating scale of four (4) will consider that the situation is always exhibited or done by the school administrator and one (1) which implies that the school administrator never practices the situation.

Mean Interval	Descriptive Level	Descriptive Interpretation
3.26 - 4.00	Very High	The team building practice is always evident among school administrators
2.51 - 3.25	High	The team building practice is oftentimes evident among school administrators.
1.76 - 2.50	Moderate	The team building practice is seldom evident among school administrators.
1.00 - 1.75	Low	The team building practice is never evident among school administrators.

The questionnaire that focuses on the level of school's effectiveness in terms of administrator's competencies in developing staff support and student personnel services, support from the community and support from the parents was adopted from the study of Patino-Lico (2008). It was validated by experts and subjected for pilot-testing to get the internal consistence of the items. The scale was found to have a reliability value of .982 using Cronbach's alpha. A Likert scale of 1-4 was utilized in this questionnaire, with 1 denoting that the action contributes to poor school effectiveness and 4, which denotes that the action contributes to an excellent level of effectiveness.

Mean Interval	Descriptive Level	Descriptive Interpretation
3.26 - 4.00	Excellent	Condition or provision is nearly 100 percent contributory to school effectiveness
2.51 - 3.25	Good	Condition or provision is 75 percent contributory to school effectiveness.
1.76 - 2.50	Fair	Condition or provision is 50 percent contributory to school effectiveness.
1.00 - 1.75	Poor	Condition or provision is to 25 percent contributory to school effectiveness.

### Data Analysis

Pearson Product Moment Correlation (Pearson's r coefficient) was employed to determine the interrelationships between leadership behavior, organizational support, and team-building practices with school effectiveness.

Multiple linear regression analysis was used to determine whether leadership behavior, organizational support and team building practices significantly predict school effectiveness of public elementary school administrators.

Lastly, Structural Equation Modeling (SEM) was utilized to determine the interrelationships of the variables and its fit indices. There were numerous fit measures which were designed to give information about how well the data fits in the dataset, however, only six were selected to be used in this study. The selection was made based on the most commonly-used and generally-accepted fit measures used by researchers having similar studies. The selected measures were Chi-square over Degree of Freedom (CMIN/DF), The Goodness of Fit Index (GFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and P of close fit (PCLOSE).

## RESULTS AND DISCUSSION

### Leadership Behaviour of Public Elementary School Administrators in Davao Region

It can be gleaned in the table 1 that the level of school leadership of public elementary school administrators in terms of developing and communicating vision, mission, goals and objectives (VMGO) interpreted as that of expert, as manifested by the overall mean score of 3.69 with a standard deviation of 0.45. On a per-item analysis, it was found that the item "Aligns goals and objectives with the school vision and mission" has the highest mean score of 3.73, or Expert, with a standard deviation of 0.54, while the item "Expresses ownership and personal responses to the identified issues" has the lowest mean score of 3.65, or Expert, with a standard deviation of 0.55. This implies that school administrators value alignment of school activities and their management on the school's operational philosophy (the VMGO).

Table 1. Level of Leadership Behavior of Public Elementary School Administrators in terms of School Leadership

Items	Mean	SD	Interpretation
<b>DEVELOPING &amp; COMMUNICATING VISION, MISSION, GOALS, AND OBJECTIVES</b>			
1. Expresses ownership and personal responses to the identified issues	3.65	0.55	Expert
2. Involves internal and external stakeholders in formulating and achieving school VMGO	3.71	0.47	Expert
3. Aligns goals and objectives with the school vision and mission.	3.73	0.54	Expert
4. Communicates the school VMGO clearly.	3.69	0.52	Expert
<b>Category Mean</b>	<b>3.69</b>	<b>0.45</b>	<b>Expert</b>
<b>DATA-BASED STRATEGIC PLANNING</b>			
1. Involves internal and external stakeholders in developing School Improvement Plan/Annual Improvement Plan (SIP/AIP)	3.72	0.49	Expert
2. Utilize data, e.g. School Based Management (SBM) assessment, Teacher Strengths & Needs Assessment (TSNA), and strategic planning in the development of SIP/AIP	3.74	0.45	Expert
3. Aligns the SIP/AIP with national, regional and local education policies and thrust	3.70	0.49	Expert
4. Communicates effectively SIP/AIP to internal and external stakeholders.	3.69	0.51	Expert
<b>Category Mean</b>	<b>3.71</b>	<b>0.43</b>	<b>Expert</b>
<b>LEADING AND MANAGING CHANGE</b>			
1. Maintains an open, positive and encouraging attitudes toward change	3.66	0.59	Expert
2. Assists teachers in identifying strengths and growth areas through monitoring observation.	3.68	0.58	Expert
3. Introduces innovations in the school program to achieve higher learning outcomes.	3.70	0.52	Expert
4. Monitors and evaluates the implementation of change programs included in SIP/AIP	3.71	0.51	Expert
5. Observes and applies multi-tasking in giving assignments	3.64	0.58	Expert
6. Advocates and executes plans for changes including culture change in the workplace	3.67	0.49	Expert
7. Empowers teachers and personnel to identify initiate and manage changes	3.62	0.60	Expert
<b>Category Mean</b>	<b>3.67</b>	<b>0.44</b>	<b>Expert</b>
<b>Overall Mean</b>	<b>3.69</b>	<b>0.59</b>	<b>Expert</b>

Also, the level of school leadership of public elementary school administrators in terms of data-based strategic planning is interpreted as that of the expert as manifested on the overall mean score of 3.71 with a standard deviation of 0.43. On a per-item analysis, it was found out that the item "Utilize data, e.g. School Based Management (SBM) assessment, Teacher Strengths & Needs Assessment (TSNA) and strategic planning in the development of SIP/AIP" has the highest mean score of 3.74, or Expert, with a standard deviation of 0.45, while the item "Communicates effectively SIP/AIP to internal and external stakeholders" has the lowest mean score of 3.69, or Expert, with a standard deviation of 0.51. This implies that school administrators apply or use data in their decision-making and planning activities for the school.

Lastly, the level of school leadership of public elementary school administrators in terms of leading and managing change is on the expert level, as manifested on the overall mean score of 3.67 with a standard deviation of 0.46. On a per-item analysis, it was found out that the item "Monitors and evaluates the implementation of change programs included in SIP/AIP" has the highest mean score of 3.71, or Expert, with a standard deviation of 0.51, while the item "Empowers teachers and personnel to identify initiate and manage changes" has the lowest mean score of 3.62, or Expert,

with a standard deviation of 0.59. This implies that school administrators employ monitoring on the implementation of changes towards the school and involves resources and persons involved to actualize them. Combining the three indicators of leadership behavior generates an over-all mean of 3.69 and a standard deviation of .59, and interpreted as Expert level. The result indicates that school administrators are experts in ensuring that their leadership behavior can inculcate in appreciation of the vision, mission, goals and objectives, effective planning by using data available in school and managing change in the school. This is affirmed by Owens and Valesky (2007) that educational leaders must strive for a vision of the school that seeks to be engaged in infinite process of change and development.

It can be gleaned in the table 2 that the level of instructional leadership of public elementary school administrators in terms of assessment for learning is on the Expert level, as manifested on the overall mean score of 3.65 with a standard deviation of 0.45. On a per-item analysis under assessment for learning, it was found that the item "Manages the processes and procedures in monitoring student achievement" has the highest mean score of 3.69 or Expert interpretation, with a standard deviation of 0.48; while the item "Creates and manages school processes to ensure student progress is conveyed to students and parents/guardians regularly" has the lowest mean score of 3.60 or Expert interpretation, with a standard deviation of 0.59. This implies that school administrators ensure that they monitor the academic progress of the pupils in the school they manage; such that this is one of the most crucial and primordial concerns the administrator dauntingly face daily.

Table 2. Level of Leadership Behavior of Public Elementary School Administrators in terms of Instructional Leadership

Items	Mean	SD	Interpretation
<b>ASSESSMENT FOR LEARNING</b>			
1. Manages the processes and procedures in monitoring student achievement	3.69	0.48	Expert
2. Ensures utilization of a range of assessment processes to assess student performance	3.64	0.51	Expert
3. Assess the effectiveness of curricular/co-curricular programs and or instructional strategies	3.68	0.53	Expert
4. Utilizes assessment results to improve learning	3.67	0.52	Expert
5. Creates and manages school processes to ensure student progress is conveyed to students and parents/guardians regularly	3.60	0.59	Expert
<b>Category Mean</b>	<b>3.65</b>	<b>0.45</b>	<b>Expert</b>
<b>DEVELOPING PROGRAMS AND/OR ADAPTING EXISTING PROGRAMS</b>			
1. Develops/adapts a research-based school program	3.63	0.52	Expert
2. Assists in implementing an existing, coherent and responsive school-wide curriculum	3.62	0.51	Expert
3. Addresses deficiencies and sustain successes of current programs in collaboration with teachers and learners	3.63	0.52	Expert
4. Develops a culture of functional literacy	3.64	0.49	Expert
<b>Category Mean</b>	<b>3.63</b>	<b>0.43</b>	<b>Expert</b>
<b>IMPLEMENTING PROGRAMS FOR INSTRUCTIONAL IMPROVEMENT</b>			
1. Manages the introduction of curriculum initiatives in line with DepED policies (e.g. BEC, Madrasah)	3.71	0.49	Expert
2. Work with teachers in curriculum review	3.66	0.53	Expert
3. Enriches curricular offerings based on local needs	3.64	0.56	Expert
4. Manages curriculum innovation and enrichment with the use of technology	3.63	0.53	Expert
5. Organizes teams to champion instructional innovation programs toward curricular responsiveness	3.61	0.55	Expert
<b>Category Mean</b>	<b>3.65</b>	<b>0.45</b>	<b>Expert</b>
<b>INSTRUCTIONAL SUPERVISION</b>			
1. Prepares and implements an instructional supervisory plan	3.72	0.48	Expert
2. Conducts instructional supervision using appropriate strategy	3.69	0.52	Expert
3. Evaluates lesson plans as well as classroom and learning management	3.69	0.54	Expert
4. Provides in a collegial manner timely, accurate and specific feedbacks to teachers regarding their performance	3.63	0.60	Expert
5. Provides technical assistance and instructional support	3.58	0.64	Expert
<b>Category Mean</b>	<b>3.66</b>	<b>0.47</b>	<b>Expert</b>
<b>Overall Mean</b>	<b>3.65</b>	<b>0.60</b>	<b>Expert</b>



Also, the level of instructional leadership of public elementary school administrators in terms of developing programs and/or adapting existing programs was found to be on the Expert level, as manifested on the overall mean score of 3.63 with a standard deviation of 0.43. On a per-item analysis, it was found out that the item "Develops a culture of functional literacy" has the highest mean score of 3.64, or Expert, with a standard deviation of .489, while the item "Assists in implementing an existing, coherent and responsive school-wide curriculum" has the lowest mean score of 3.62, or Expert, with a standard deviation of 0.51. The result implies that school administrators are particular on the academic culture that they lead and inculcate a culture of excellence through assistance in the implementation of curriculum suitable to the context of excellence.

Also, based on the table, the level of instructional leadership of public elementary school administrators in terms of implementing programs for instructional improvement was found to be on the Expert level, as manifested on the overall mean score of 3.65 with a standard deviation of 0.45. On a per-item analysis, it was found out that the item "Manages the introduction of curriculum initiatives in line with Department of Education (DepED) policies (e.g. Basic Education Curriculum, Madrasah)" has the highest mean score of 3.71, or Expert, with a standard deviation of 0.49 while the item "Organizes teams to champion instructional innovation programs toward curricular responsiveness" has the lowest mean score of 3.61, or Expert, with a standard deviation of 0.55.

The result entails that a school administrator, as an instructional leader, ensures that he/she conforms to the mandate of the higher bureau, especially on the implementation of curricular policies and programs.

Lastly, the level of instructional leadership of public elementary school administrators in terms of instructional supervision is in the Expert level, as manifested on the overall mean score of 3.66 with a standard deviation of 0.47. On a per-item analysis, it was found out that the item "Prepares and implements an instructional supervisory plan" has the highest mean score of 3.72, or Expert, with a standard deviation of 0.48, while the item "Provides technical assistance and instructional support" has the lowest mean score of 3.58, or Expert, with a standard deviation of 0.64. This implies that an expert school administrator seeks to plan or map out a standard supervisory plan to become effective in instructional management, while aiming to assist or support the people in the organization.

Combining the four indicators of leadership behaviour in the second domain (instructional leadership) generates an overall mean of  $\bar{x}=3.65$  and a standard deviation of 0.60, described as Expert level. The result indicates that school administrators are experts in ensuring that their leadership behaviour must ensure that policies and programs relative to the curriculum, instruction and academic progress in the school they lead is a requirement.

The above results were corollary to the findings of Coburn and Russell (2008), who elucidated that effective school principals have in-depth understanding of standards-based instructional practices before they can adequately support the development of these practices in their teachers. For instance, an understanding of instruction is necessary because school leaders influence the ways that teachers talk about the goals of district-level instructional reform, and the degree to which the conversations are aligned with intended reform goals.

### **Level of Organizational Support of Public Elementary School Administrators in Davao Region**

It can be gleaned in the table 3, the level of organizational support of public elementary school administrators as perceived by the public elementary school teachers is on the agreeable level, as manifested on the overall mean score of  $\bar{x}=2.85$  with a standard deviation of 0.61. On a per-item analysis, it was found that the item "The organization value my contribution to its well-being"

has the highest mean score of  $\bar{x}=3.48$ , or Expert, with a standard deviation of 0.69, while the item “Even if I did the best job possible, the organization would fail to notice” has the lowest mean score of  $\bar{x}=2.36$ , or Fairly Well Agree, with a standard deviation of 1.136. This implies that school administrators value every person in the organization as an essential contributor of the success of the organization. Reverse interpretation item that attained the lowest mean score implies that school administrators recognize the efforts of its teachers and staff. A good school administrator of a public elementary school, hence, values the contribution and role of each of the persons in the organization – a very good way of manifesting support to them.

Table 3. Level of Organizational Support of Public Elementary School Administrators

Items	Mean	SD	Interpretation
1. The organization values my contribution to its well-being.	3.48	.688	Strongly Agree
2. The organization fails to appreciate any extra effort from me.	2.48	1.075	Fairly Agree
3. The organization would ignore any complaint from me	2.37	1.152	Fairly Agree
4. The organization really cares about my well-being.	3.33	.801	Strongly Agree
5. Even if I did the best job possible, the organization would fail to notice.	2.36	1.136	Fairly Agree
6. The organization cares about my general satisfaction at work.	3.19	.850	Agree
7. The organization shows very little concern for me.	2.37	1.167	Fairly Agree
8. The organization takes pride in my accomplishment at work.	3.27	.774	Agree
<b>Overall Mean</b>	<b>2.85</b>	<b>.611</b>	<b>Agree</b>

### Degree of Team-Building Practices of Public Elementary School Administrators in Davao Region

It can be gleaned in the Table 4, the degree of problem-solving practices by public elementary school administrators is “Always”, as manifested on the overall mean score of  $\bar{x}=3.55$  with a standard deviation of 0.52. On a per-item analysis under problem-solving practices, it was found that the item “Looks for ways to make things better” has the highest mean score of  $\bar{x}=3.60$ , or Always, with a standard deviation of 0.61, while the item “Encourages initiative and interest for group members to speak up/talk about their problems regarding team-building” has the lowest mean score of  $\bar{x}=3.47$ , or Always, with a standard deviation of 0.66. This implies that teachers see their school administrators to exhibit problem-solving practices in addressing challenges in the school and in the organization that they are leading.

Table 4. Level of Team-Building Practices of Public Elementary School Administrators in terms of Problem-Solving Practices

Items	Mean	SD	Interpretation
1. Encourages initiative and interest for group members to speak up/talk about their problems regarding team-building.	3.47	0.66	Always
2. Shares the goals to the group to be attained in problem solving	3.48	0.63	Always
3. Believes in finding a workable solution	3.54	0.65	Always
4. Looks for ways to make things better.	3.60	0.61	Always
5. Focuses on the issues not on the personal characteristics of the individual in the team	3.56	0.63	Always
6. Turns creative ideas into actions	3.58	0.60	Always
7. Provides subordinates with sufficient information to come up with a high quality solution.	3.54	0.61	Always
8. Comes up with the right decision in solving the problems	3.58	0.60	Always
9. Explains the rationale for the decisions in problem solving	3.56	0.61	Always
10. Meets with the group to share the problems and obtain inputs from them and then decide.	3.59	0.60	Always
<b>Category Mean</b>	<b>3.55</b>	<b>0.52</b>	<b>Always</b>

It can be gleaned in the table 5, the degree of practice of communicating practices by public elementary school administrators is interpreted as “Always”, as manifested on the overall mean score of  $\bar{x}=3.55$  with a standard deviation of 0.52. On a per-item analysis, it was found that the item “Communicates facts and opinion to co-workers and subordinates” has the highest mean score of  $\bar{x}=3.58$ , or Always, with a standard deviation of 0.57, while the item “Provides opportunities for free expressions of ideas to plan improvements and other projects in school” has the lowest mean score

of  $\bar{x}$ =3.50, or Always, with a standard deviation of 0.60. This implies that teachers see their school administrators to always exhibit communicating practices in addressing challenges in the school and in the organization that they are leading, and in leading the team towards the attainment of organization's goals.

Table 5. Level of Team-Building Practices of Public Elementary School Administrators in terms of Communicating Practices

	Items	Mean	SD	Interpretation
1.	Communicates facts and opinion to co-workers and subordinates	3.58	.570	Always
2.	Shows proficiency in the required language of giving instruction during conferences	3.57	.605	Always
3.	Provides opportunities for free expressions of ideas to plan improvements and other projects in school	3.50	.595	Always
4.	Maintains and uses an active network of personal contacts for mutual benefits	3.55	.570	Always
5.	Lets the group interact primarily to share information, make decisions and perform their responsibility.	3.52	.587	Always
6.	Lets the group discuss the ideas for clarity	3.57	.580	Always
7.	Allows group members to communicate their ideas fully and openly.	3.55	.607	Always
8.	Provides clarification ensure understanding and assure subordinates and other administrators that I am listening and interested in what they say.	3.54	.694	Always
9.	Accepts criticism from other administrators and teachers.	3.51	.679	Always
10.	Transmits information/ messages among school administrators during conferences and to the teachers.	3.57	.636	Always
11.	Communicates in a manner understood by other administrators and my teachers	3.55	.661	Always
12.	Pays particular attention for developing and displaying communication, negotiation and other interpersonal skills.	3.54	.665	Always
13.	Shares teambuilding practices and decision making with team members, teachers and other administrators and to create a participative environment.	3.55	.651	Always
<b>Category Mean</b>		<b>3.55</b>	<b>.519</b>	<b>Always</b>

It can be gleaned in the table 6, the degree of practice of planning practices by public elementary school administrators is "Always", as manifested on the overall mean score of  $\bar{x}$ =3.58 with a standard deviation of 0.47. On a per-item analysis, it was found that the item "Frames objectives in terms of organizational goals" has the highest mean score of  $\bar{x}$ =3.63, or interpreted as Always, with a standard deviation of 0.57, while the item "Identifies the capabilities of the working groups in the organization" has the lowest mean score of  $\bar{x}$ =3.55, or Always, with a standard deviation of 0.54. This implies that teachers see their school administrators to always plan their activities and programs, and were seen to be good in framing organizational objectives and goals as well as ensuring that once what their plans were carried out, they met on what were expected.

Table 6. Level of Team-Building Practices of Public Elementary School Administrators in terms of Planning Practices

	Items	Mean	SD	Interpretation
1.	Frames objectives in terms of organizational goals	3.63	0.57	Always
2.	Maintains and use an active network of personal contacts for mutual benefits.	3.60	0.55	Always
3.	Provides administrator/teacher opportunities in planning for achievement and performance.	3.58	0.53	Always
4.	Identifies the capabilities of the working groups in the organization.	3.55	0.54	Always
5.	Selects and plans the course of action that has the most need and the least serious disadvantage.	3.54	0.54	Always
6.	Initiates program and activities necessary to carry out plans.	3.58	0.53	Always
7.	Makes sure that the plan is going according to expectations.	3.62	0.52	Always
<b>Category Mean</b>		<b>3.58</b>	<b>0.47</b>	<b>Always</b>

Table 7 shows the degree of practice of implementing practices by public elementary school administrators is interpreted as "Always", as manifested on the overall mean score of  $\bar{x}$ =3.61 with a standard deviation of 0.46. On a per-item analysis, it was found that the item "Performs/operates tasks honestly, religiously and purposively" has the highest mean score of  $\bar{x}$ =3.69, or Always, with a standard deviation of .515, while the item "Efficiently and effectively handle complex challenges" has the lowest mean score of  $\bar{x}$ =3.54, verbalized that administrators not only build or Always, with

a standard deviation of 0.61. It could be inferred that the administrators closely guided and motivated their teachers to perform better. They coordinate with the school's stakeholders to carry out their plans during implementation, engage with stakeholders in school improvement planning, among others.

Table 7. Level of Team-Building Practices of Public Elementary School Administrators in terms of Implementing Practices

Items	Mean	SD	Interpretation
1. Performs/operates tasks honestly, religiously and purposively.	3.69	0.52	Always
2. Accesses resources for the work activities of the group.	3.67	0.51	Always
3. Reads, studies, observes and develops skills to become effective.	3.62	0.54	Always
4. Reads/explains to a prospective team the key ingredient that will make the organization successful.	3.63	0.56	Always
5. Encourages employees to manifest favorable attitude and behavior towards their work.	3.63	0.57	Always
6. Guides and motivates people to work in the department for a common purpose.	3.61	0.57	Always
7. Flexibly floats members from one area to another depending on where they are needed most.	3.62	0.53	Always
8. Accomplishes what is set for implementation.	3.57	0.55	Always
9. Efficiently and effectively handle complex challenges.	3.54	0.61	Always
10. Discusses the job description of every employee to avoid duplication of functions.	3.55	0.58	Always
11. Makes resources accessible for the work activities of the team members.	3.59	0.61	Always
12. Coordinates with subordinate and school administrators to carry out plans for implementation.	3.63	0.55	Always
13. Issues order and instructions for work group top attain in the implementation.	3.57	0.61	Always
14. Monitors work activities to accomplish the organizational goal.	3.58	0.56	Always
15. Delegates assignments to group members for implementation and compliance.	3.63	0.51	Always
<b>Category Mean</b>	<b>3.61</b>	<b>0.46</b>	<b>Always</b>

Based on the overall mean scores of the four practices under team-building practices, the level of team building practices as perceived by the teachers is on the strongly agreeable level, as manifested by the overall mean of 3.57, or Agree, and a standard deviation of 0.46. This means that teachers view their school administrators to recurrently exhibit problem-solving, communicating, planning, and implementing practices in the school they manage.

The overall findings on the level of team-building practices of school administrators of public elementary schools in Davao Region coincide with Hayward's (2005) findings, writing that the school principal's impact is so significant because of the leadership actions principals take to create the school-wide conditions that support student learning-especially those that directly influence teacher effectiveness, including hiring, professional development, evaluation, and retention or dismissal. Many principals are leveraging these actions to lead dramatic gains school effectiveness, despite the fact that elementary schools and principals are not achieving these necessary results for students at scale.

### Level of Effectiveness of Public Elementary School Administrators in Davao Region

Table 8 shows the level of competencies in improving staff support services of public elementary school administrators is excellent, as manifested on the overall mean score of  $\bar{x}=3.56$  with a standard deviation of 0.47. On a per-item analysis, it was found that the item "Conducts a systematic program of staff improvement through classroom observation and conferences with staff" has the highest mean score of  $\bar{x}=3.65$ , or excellent, with a standard deviation of 0.52, while the item "Assess group and individual in-service educational activities and recommends ways of improving them" has the lowest mean score of  $\bar{x}=3.50$ , or excellent, with a standard deviation of .576. It could be inferred that the administrators closely guided and motivated their teachers to perform better. They coordinate with the school's stakeholders to carry out their plans during implementation, engage with stakeholders in school improvement planning, among others.

Table 8: Level of School Effectiveness of Public Elementary School Administrators in terms of Competencies in Improving Staff Support Services

	Items	Mean	SD	Interpretation
1.	Defines the specific role requirements for each position vacancy	3.57	0.57	Excellent
2.	Interviews and selects from identified candidates the staff member best qualified for each position and recommends appointments.	3.60	0.55	Excellent
3.	Coordinates the orientation of new staff members to the school system, the staff, the student body, and the community	3.55	0.58	Excellent
4.	Assess the degree of congruence between expectations for the role and the need-dispositions of the individual.	3.51	0.61	Excellent
5.	Assigns new staff members to optimize the achievement of both organizational goals of individual staff members.	3.50	0.63	Excellent
6.	Reassigns experienced staff members to positions and roles to permit the attainment of organizational and individual goals.	3.59	0.54	Excellent
7.	Articulates and coordinates individual and submit goals and programs with school and school system goals and programs	3.57	0.59	Excellent
8.	Engages in development activities and designed to update his professional knowledge and skill related to educational and administrative processes	3.63	0.53	Excellent
9.	Conducts a systematic program of staff improvement through classroom observation and conferences with staff	3.65	0.52	Excellent
10.	Organizes such staff improvement activities, the professional library, student teaching programs, and in-service activities.	3.61	0.52	Excellent
11.	Guides each staff members toward selective involvement in staff improvement activities	3.51	0.58	Excellent
12.	Assess group and individual in-service educational activities and recommends ways of improving them.	3.50	0.58	Excellent
13.	Involves the staff in reaching agreement on the purposes of evaluation and the procedures to be utilized.	3.54	0.55	Excellent
14.	Collects, organizes and analyzes data concerning the processes and products of teaching.	3.53	0.55	Excellent
15.	Bases the decisions on specific evaluative date.	3.54	0.54	Excellent
<b>Category Mean</b>		<b>3.56</b>	<b>0.47</b>	<b>Excellent</b>

Table 9 shows the level of competencies in improving student personnel services of public elementary school administrators is interpreted excellent, as manifested on the overall mean score of  $\bar{x}=3.58$  with a standard deviation of 0.48. On a per-item analysis, it was found that the item "Reviews and explicates the goals and objectives of the school as an institution" has the highest mean score of  $\bar{x}=3.62$ , or excellent, with a standard deviation of 0.51, while the item "Initiates research and utilizes research information from present and previous students as a basis for improving the guidance and total educational programs" has the lowest mean score of  $\bar{x}=3.52$ , or excellent, with a standard deviation of 0.63. It could be inferred that the administrators were highly effective in coordinating the orientation of new staff members to the school system to include the staff, the students' body and the community. They also highly effective in engaging in student development activities, in updating professional knowledge and skills and coming up with decisions based on evaluation.

Table 9. Level of School Effectiveness of Public Elementary School Administrators in terms of Competencies in Improving Student Personnel Services

	Items	Mean	SD	Interpretation
1.	Analyzes, assesses and describes the value orientation of the students within the school.	3.60	0.54	Very Effective
2.	Reviews and explicates the goals and objectives of the school as an institution.	3.62	0.51	Very Effective
3.	Analyzes and understands his own and the value orientations of the school staff.	3.60	0.54	Very Effective
4.	Makes provisions for involving students meaningfully in the decisions concerning the program of the school.	3.58	0.54	Very Effective
5.	Coordinates the planning, staffing, financing, and evaluation of a viable curricular program in the school.	3.57	0.56	Very Effective
6.	Supports the development of operational policies and provides the resources for an effective student government within the school.	3.58	0.57	Very Effective
7.	Stimulates the development of activities directed toward providing information about and to students.	3.55	0.59	Very Effective
8.	Places priority on counseling with individual and groups of students, teachers and parents.	3.57	0.58	Very Effective
9.	Participates in setting policies and expediting procedures for in-school and subsequent placement of students.	3.57	0.55	Very Effective
10.	Initiates research and utilizes research information from present and previous students as a basis for improving the guidance and total educational programs.	3.52	0.63	Very Effective
11.	Structures activities that foster understanding and interaction among students, teachers, counselors, and other student personnel specialists.	3.57	0.58	Very Effective
12.	Studies and understands recent legislation and court decisions having implications for the administration of the school.	3.55	0.60	Very Effective
13.	Utilizes legislative and legal data as a basis for affecting change in the goals, objectives, and procedures of the school and in the values, roles and behavior of organizational participants.	3.59	0.57	Very Effective
<b>Category Mean</b>		<b>3.58</b>	<b>0.48</b>	<b>Very Effective</b>

Table 10 shows the data about the level of school effectiveness of public elementary schools in Davao Region as evaluated by the teachers in terms of school support gained from the community. It can be gleaned in the table, the level of support of the community to public elementary school administrators interpreted excellent, as manifested on the overall mean score of  $\bar{x}=3.56$  with a standard deviation of 0.52.

On a per-item analysis, it was found that the item "The school maintains a harmonious and cooperative relationship with the community, uses community resources and makes its resources available to the community when need" has the highest mean score of  $\bar{x}=3.60$ , or excellent, with a standard deviation of 0.57, while the item "There are established linkages with government agencies, local and abroad" has the lowest mean score of  $\bar{x}=3.53$ , or excellent, with a standard deviation of 0.63. It could be inferred that the administrators are highly making it sure that each school has an inventory of community resources and a consideration of community needs, problems and resources. They also maintain a harmonious and cooperative relationship with the community using community resources and making these available when needed.

Table 10. Level of School Effectiveness of Public Elementary School Administrators in terms of Support Gained from the Community

	Items	Mean	SD	Interpretation
1.	The school has an inventory of community resources.	3.58	0.57	Very Effective
2.	The school considers the needs, problems and resources of community and its program.	3.56	0.60	Very Effective
3.	The school maintains a harmonious and cooperative relationship with the community, uses community resources and makes its resources available to the community when need.	3.60	0.57	Very Effective
4.	There are established linkages with government agencies, local and abroad.	3.53	0.63	Very Effective
5.	There is an exchange of resources and services of the school and community that is beneficial to both.	3.54	0.61	Very Effective
<b>Category Mean</b>		<b>3.56</b>	<b>0.52</b>	<b>Very Effective</b>

Table 11 reveals the level of support of the parents to public elementary school administrators is interpreted excellent, as manifested on the overall mean score of  $\bar{x}=3.53$  with a standard deviation of .540. On a per-item analysis, it was found that the item "Parents actively

participate in school programs” has the highest mean score of  $\bar{x}=3.57$ , or excellent, with a standard deviation of 0.63, while the item “Parents participate in the decision-making process” has the lowest mean score of  $\bar{x}=3.46$ , or excellent, with a standard deviation of 0.67. It could be inferred that the school administrators were rated high in the aspects of getting immediate responses from parents when being called for a meeting with the administrators, collaborating with parents in activities in the school, especially when the parents are being called to participate and participating in decision-making activities with the teachers and the school administrators when needed (i.e. PTCA).

Table 11. Level of School Effectiveness of Public Elementary School Administrators in terms of Support gained from the Parents

	Items	Mean	SD	Interpretation
1.	Parents responded immediately when meeting is called by the principal.	3.56	.613	Very Effective
2.	Parents attend cleanliness activities during opening of classes.	3.51	.650	Very Effective
3.	Parents participate in the improvement of the school.	3.56	.609	Very Effective
4.	Parents actively participate in school programs.	3.57	.629	Very Effective
5.	Parents participate in the decision-making process.	3.46	.665	Very Effective
6.	Parents donate projects for the improvement of the school.	3.49	.656	Very Effective
<b>Category Mean</b>		<b>3.53</b>	<b>.539</b>	<b>Very Effective</b>

Based on the overall mean scores of the four indicators under school effectiveness, the level of school effectiveness attained by school administrators as perceived by the teachers is on the excellent level, as manifested by the overall mean of  $\bar{x}=3.56$  and a standard deviation of 0.45. This means school administrators were able to make their schools highly effective in terms of administrative competencies they do in improving students and their staff, and in gaining support from the parents and the community at large. This simply means that school administrators in the public elementary school system in Davao Region are operating effectively.

The overall findings on the level of school effectiveness of public elementary schools in Davao Region concurs with the findings of Grissom and Loeb (2009), saying that effective leaders are those who do a good job – as human capital managers, and collaborate with external stakeholders. This further implies that school administrators emerge as a true embodiment of effective organizational leaders if it balances the internal and external environments they work with.

### **Relationship of Leadership Behavior, Organizational Support, and Team Building Practices with School Effectiveness**

The data in Table 12 shows the correlation of the three independent variables, which are leadership behavior, organizational support, and team building practices with the dependent variable which is the school effectiveness.

It can be seen in the results that leadership behavior is significantly related to team building practices as reflected by the p-value that is less than 0.05 and correlation coefficient,  $r_{xy} = 0.688$ . This implies that high leadership behavior of administrators would essentially increase the effectiveness of the administrator and the public elementary school as a whole.

Similarly, the relationship between organizational support and school effectiveness is found to be significant with a p-value less than 0.05, and  $r_{xy} = 0.256$ . This implies that those who perceive the organizational support by their school administrators may likely manifest increase of effectiveness of the administrator of the public elementary school.

In the same way, there is a significant relationship between team building practices and school effectiveness ( $r_{xy} = 0.806$ ,  $p < 0.05$ ). This means that a public elementary school

administrator who is seen to highly practice team building practices or activities in the organization manifest effectiveness in his/her management or leadership as well as the school as a whole.

Table 12: Relationship between Leadership Behavior, Organizational Support and Team-Building Practices on School Effectiveness

Independent Variables (x)	Dependent Variable: School Effectiveness (y)			
	R	Probability	Level of Relationship	Remarks
Leadership Behavior	.688**	.000	Moderate Positive	Significant
Organizational Support	.256**	.000	Low Positive	Significant
Team-Building Practices	.806**	.000	High Positive	Significant

\*\* Significant at 0.05 level

### Influence of Leadership Behavior, Organizational Support, and Team-Building Practices on School Effectiveness

Table 13 presents the results of multiple linear regression analysis which purpose is to show the significant predictors of school effectiveness. The results indicate that leadership behavior, organizational support, and team-building practices were found to be significant predictors of school effectiveness.

In particular, it shows that leadership behavior, organizational support and team-building practices have positive standardized beta coefficients and have highly-significant influence on organizational support ( $p < 0.01$ ). In other words, the regression weights of the three predictor variables in the prediction of school effectiveness are significantly different from zero at the 0.01 level (two-tailed).

Thus, for every unit increase in leadership behavior, organizational support, and team-building practices, there is a corresponding increase in the organizational commitment by 0.168, 0.047 and 0.666, respectively. This would imply that leadership behavior, organizational support and team-building practices have significant contributions to school effectiveness.

The results conform to the findings of Sharma and Bajpai (2010), who reported nearly 60 percent of a school's total effectiveness, is impacted and attributable to principal leadership, among other variables like teacher effectiveness, motivation and school support systems. Moreover, a comprehensive review of the research on school leadership found that the quality of the principal alone accounts for 25 percent of a school's achievement.

Table 13. Multiple Regression Analysis on School Effectiveness with Leadership Behavior, Organizational Support and Team-Building Practices as Predictors

Predictor Variables (x)	Predicted Variable (y)			
	$\beta$	t	p-value	Remarks
Constant	.428	3.489	.001**	
Leadership Behavior ( $x_1$ )	.168	3.275	.001**	Significant
Organizational Support ( $x_2$ )	.047	2.258	.024*	Significant
Team-Building Practices ( $x_3$ )	.666	15.116	.000**	Significant

\*\* Significant at 0.01 level

\*Significant at 0.05 level

F-value = 299.899  
 p-value = .000  
 R-square = .660  
 = 66 percent

Lastly, the findings were apparent in the results of the regression analysis wherein 66percent of the variance of school effectiveness were explained by the three independent variables (Leadership Behavior, Organizational Support, and Team-Building Practices) as indicated



by  $R^2 = 0.66$ . This would mean that 34 percent of the variation can be attributed to other factors aside from the three independent variables.

The result is higher than the result of Katterfeld (2011) involving principal leadership, organizational commitment and teacher competence towards school performance, whose  $R^2$  value falls at 0.525 or 52.5 percent of the amount of variance explained.

### Structural Model Testing

To get the best fit model, this study has introduced five alternative models. The model framework could be decomposed into two sub-models: a measurement model, and a structural model. The measurement model defines relation between the observed and unobserved variables. In contrast, the structural model defines relations among the unobserved variables. Furthermore, the five hypothesized structural models display potential causal dependencies between the exogenous and endogenous variables.

Hypothesized Model 1 presented the direct relationship between the endogenous and exogenous variables. The amount of variance explained by the combined influence of leadership behavior, organizational support, and team-building practices on school effectiveness is 83percent. It can be gleaned also in the model that leadership behavior and team-building practices are strongly represented by their factors, with beta values that are greater than 0.60.

Nevertheless, the one-indicator factor, organizational commitment, has its error variance constrained to a fixed value of zero. On the other hand, leadership behavior (beta = 0.12) and team-building practices (beta = 0.90) were found to significantly influence school effectiveness ( $p < 0.05$ ).

Also, the goodness of fit results revealed that the values were not within the range of the indices criteria as shown by  $CMIN/DF > 3.0$ , ( $GFI, NFI, TLI, CFI < 0.90$ ), and  $RMSEA > 0.08$  with a  $PCLOSE < 0.05$ . This means that the model does not fit with the data.

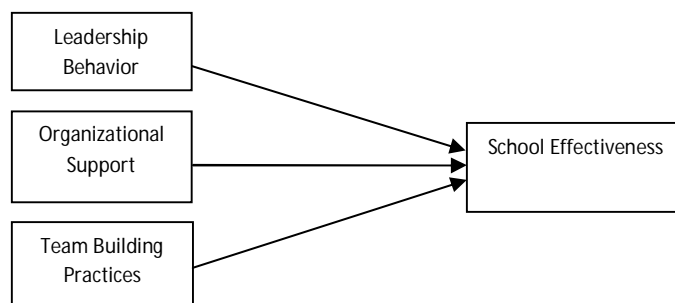


Figure 2. Hypothesized Model 1

Hypothesized Model 2 displayed the interrelationships between the exogenous variables and as well as their causal associations with the endogenous variable. As shown in Figure 3, the amount of variance explained by the combined influence of leadership behaviour, organizational support, and team-building practices on school effectiveness is 86 percent. It can be gleaned also in the model that leadership behaviour and team-building practices are strongly represented by their factors, with beta values that are greater than 0.60.

Nevertheless, the one-indicator factor, organizational commitment, has its error variance constrained to a fixed value of zero. On the other hand, only team-building practices (beta = 0.197) was found to highly and significantly influence school effectiveness ( $p < 0.05$ ). Moreover, the latent leadership behavior is positively and significantly correlated with organizational support and team-building practices, with a correlation coefficient value of 0.15 and 0.88, respectively. Also, there is a

significant relationship that exists between organizational support and team-building practices ( $r=0.25$ ,  $p$ -value  $>0.05$ ).

Finally, the goodness of fit results revealed that the values were not within the range of the indices criteria as shown by  $CMIN/DF > 3.0$ , ( $GFI < 0.90$ ), and  $RMSEA > 0.08$  with a  $PCLOSE < 0.05$ . Yet, the model fits well with other indices ( $NFI$ ,  $TLI$ ,  $CFI > 0.90$ ). Again, the result means that the model does not fit with the data.

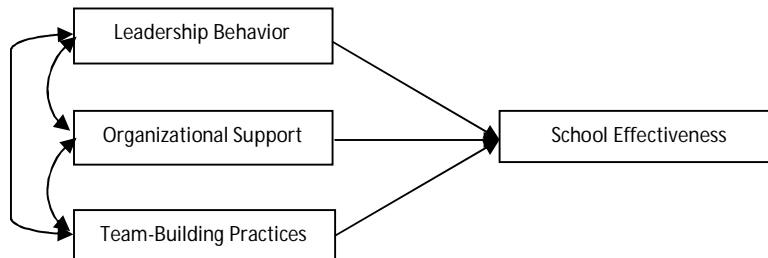


Figure 3. Hypothesized Model 2

Hypothesized Model 3 is a model modification of the previous model showing the correlation between leadership behaviour and team-building practices with their causal relations to organizational support and school effectiveness. As presented in Figure 4, a total of 86percent of the variance of school effectiveness is accounted to the combined influence of leadership behavior, organizational support, and team-building practices.

On the other hand, 8percent of the variation of organizational support can be explained by the combined influence of leadership behaviour and team-building practices. Meanwhile, leadership behaviour and team-building practices significantly affect the organizational support ( $p < 0.05$ ). In addition, the relationship between leadership behaviour and organizational support with school effectiveness is not significant with a  $p$ -value that is greater than 0.05. However, team-building practices was found to a significant predictors of school effectiveness with a  $p$ -value greater than 0.05. On the other side, the leadership behaviour, organizational support and team-building practices were strongly represented by their factors having beta values that are greater than 0.60. Furthermore, the goodness of fit statistics indicates a worthy fit in the  $NFI$  (.942),  $TLI$  (0.937),  $NFI$  (.942) and  $CFI$  (0.554). However,  $CMIN/DF$  (4.728),  $GFI$  area of .888,  $RMSEA$  (0.095) and  $PCLOSE$  (0.000) did not meet the necessary criteria.

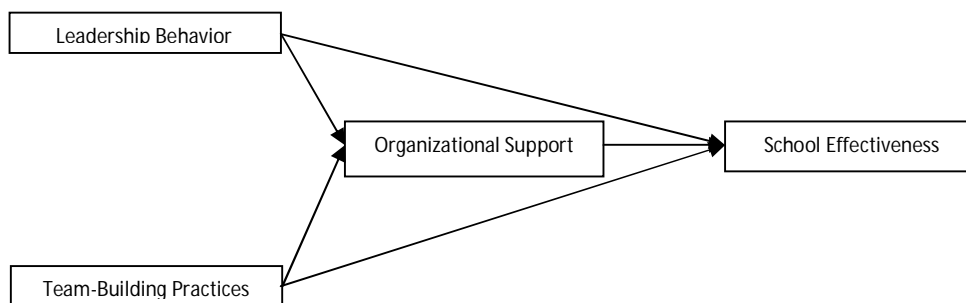


Figure 4. Hypothesized Model 3

Hypothesized Model 4 is another model modification of the previous model displaying the causal dependencies of the variable organizational support towards leadership behaviour, team-building practices and school effectiveness as the endogenous variables. As shown in Figure 5, the

causal associations of the variables are significant except with the relationship between organizational support and school effectiveness. Moreover, 81 percent of the variance in the school effectiveness can be explained by the combined influence of leadership behaviour, job satisfaction, and burnout. Also, the latent leadership behaviour, team-building practices, and school effectiveness are strongly represented by their factors, with beta values  $> 0.60$ . Similar to the previous models, organizational support has no error term due to its single-indicator nature. As to the goodness of fit measures, none of the goodness-of-fit indices is within the range of the desired criterion. The fit measures (CMIN/DF  $> 3.00$ ; GFI, NFI, TLI, CFI  $< 0.90$ ; RMSEA  $> 0.080$ , and PCLOSE  $> 0.05$ ) are not in the acceptable range indicating a poor fit model.

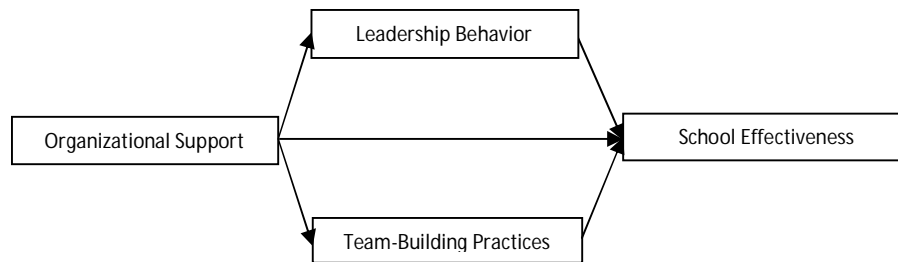


Figure 5. Hypothesized Model 4

A model generation approach was performed in Hypothesized Model 5. As observed in the previous models, the causal relationship of organizational support with the rest of the variables has very slight to negligible beta coefficients. Using model generation approach, the variable was instead used as an endogenous variable predicted by leadership behaviour and team-building practices. Also, the indicators having smaller beta value are trimmed down, co variances with minimal values were suggestively trimmed, and those factors that best represent school effectiveness remained in the model. This approach is supported by Kline (1999), stating that model respecification may include trimming or adding measures to attain good fit. As a result, the goodness of fit values changes in almost all indices, except the CMIN/DF, which remained to be higher than the acceptable value (CMIN/DF  $< 3.0$ ). However, among the models, the newly-respecified one proves to have a good fitting.

#### *The Best Fit Model of School Effectiveness*

Figure 6 shows the standardized estimates of Hypothesized Model 5. It can be gleaned in the model that 90 percent of the variance of school effectiveness can be attributed to the combined influence of leadership behavior and team-building practices. Moreover, the combined influence of leadership behavior and team-building practices explained a negligible 9 percent of the variations of organizational support. Furthermore, the latent constructs of leadership behavior, team-building practices and school effectiveness are strongly represented by their factors, with beta values greater than 0.60.

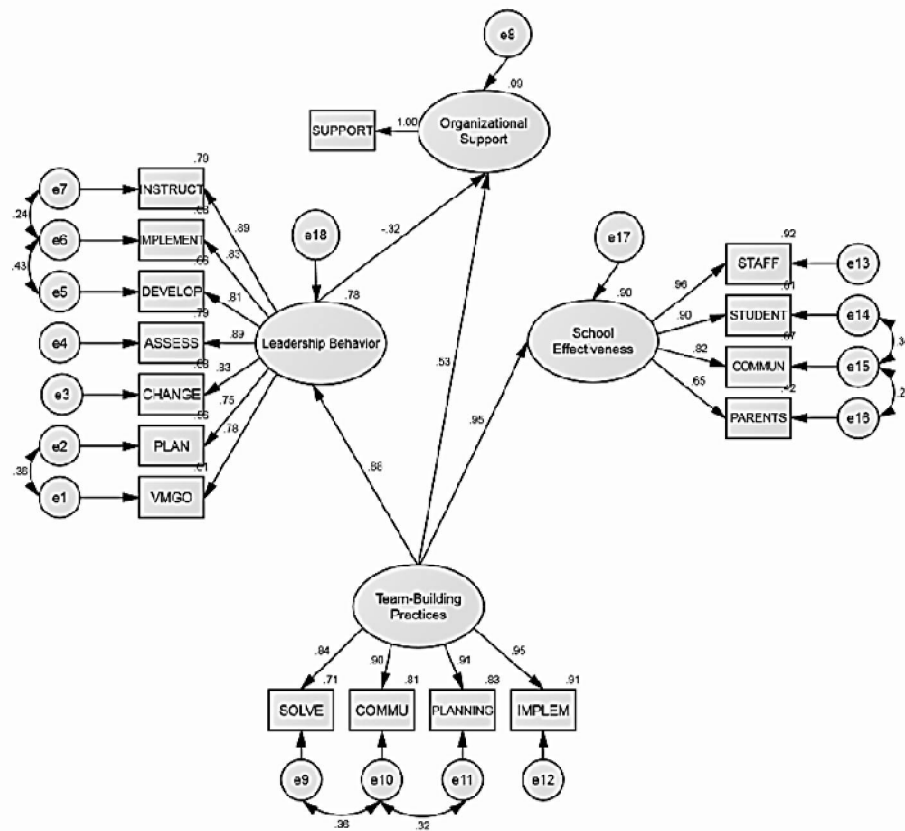


Figure 6. The Interrelationships of the Variables in Hypothesized Model 5

Table 14 shows the results of the goodness of fit measures of Hypothesized Model 5. As can be seen in the results, almost model fit values have successfully met the criteria set by each index (GFI, TLI, CFI > .90, RMSEA < 0.08 with a PCLOSE > 0.05).

However, the value of CMIN/DF was found to exceed the criterion (CMIN/DF < 3.0). This means that the model fits well with the data and therefore assert as the best fit model of organizational support. This is supported by Arbuckle (2009) denoting that CMIN/DF should be less than 3.0, and Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI) should be close to 0.90. Moreover, the RMSEA and PCLOSE values are supported by MacCallum, Browne and Sugawara (1996) indicating 0.01, 0.05, and 0.08 as excellent, good, and mediocre fit respectively, with P of close fit (PCLOSE) that is greater than 0.05.

Table 14. Goodness of Fit Measures of Hypothesized Model 5

INDEX	CRITERION	MODEL FIT VALUE
CMIN/df	< 3.00	4.682*
GFI	> 0.90	0.913
TLI	> 0.90	0.938
CFI	> 0.90	0.952
RMSEA	< 0.08	0.074
PCLOSE	> 0.05	0.062

\* Model fit values with \* denote that the value did not pass the required criterion

## CONCLUSION

Based on the analysis of the data and interpretation of the results, the researcher concluded that the teachers perceived that their school administrators are experts in terms of school leadership and instructional leadership. The school leadership was a bit higher than instructional leadership. Therefore, the public elementary school administrators in Davao Region were engaged more on the administrative side of leadership than the instruction/curriculum planning and development side of leadership. Furthermore, the teachers perceive that their school administrators have agreeable degree of organizational support to their school organizations. Therefore, public school administrators in Davao Region value every person in the organization as a contributor of the success of the organization.

The school administrators always practice team-building in terms of problem-solving, communicating, planning and implementing. School administrators were found to practice implementing a little bit more than the rest of the team-building practices. Therefore public elementary school administrators in Davao Region are often more implementers than being problem-solvers, communicators and planners. The teachers also rated their school administrators' effectiveness as excellent. Administrators, competencies in improving student services were noticeably higher than competencies in improving staff support services, school support from the community and school support from the parents. Therefore, the public elementary school administrators in Davao Region were able to make their schools highly effective in terms of administrative competencies they do in improving students and their staff, and in gaining support from the parents and the community at large. And that the public elementary school administrators in Davao Region are operating effectively.

School effectiveness is predicted by the factors of leadership behavior, organizational support and team-building practices. Team-building practices are the most significant predictor of school effectiveness.

Therefore, the findings enabled the researcher to develop a leadership enhancement program grounded on the best predictor of school effectiveness and the best-fit model will be both adopted in the policy formulation and decision making for the improvement of the Philippine educational system.

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