

**ADVERSITY QUOTIENT AND PERSONAL CHARACTERISTICS AS  
CORRELATES OF THE PERSONALITY-TEMPERAMENT TRAITS  
OF EDUCATORS IN SELECTED PUBLIC AND PRIVATE  
EDUCATIONAL INSTITUTIONS**

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**By**

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## **CHAPTER 1**

### **THE PROBLEM AND ITS BACKGROUND**

#### **Introduction**

Leadership is an inherently moral endeavor because it involves a relationship of influence and power between a leader and followers. A leader's personality plays an important role in his or her leadership activities and effectiveness. Obviously, leader would lead people in accordance with his or her personality characteristics and traits. This is highlighted in the trait leadership theory defined by Zaccaro, Kemp and Bader (2004) as an integrated pattern of personal characteristics that reflect a range of individual differences and foster consistent leader effectiveness across a variety of group and organizational situations.

Studies have established that individual characteristics, such as demographics, skills and abilities, and personality traits, predict leadership effectiveness (Eagly, Karau and Makhijani, 1995; Judge

Bono, Ilies and Gerhardt, 2002; Judge, Colbert, and Ilies, 2004; Mumford, Campion, and Morgeson, 2007 ).

Research has also demonstrated that successful leaders differ from other person and possess certain core personality traits that significantly contribute to their success. Understanding the importance of these core personality traits that predict leader effectiveness can help organizations with their leader selection, training, and development practices ( DeRue, Nahrgang, Wellman, and Humprey, 2011).

Psychologically, personality includes both character and temperament (American Psychiatric Association, 1994; Leonard, 1997; Sperry, 1997). Temperament includes the perceptual organization of information related to the self that is acted upon unconsciously. As such, this is the realm of impulses in response to some internal or external stimuli. On the other hand, character involves an individual's abstract conceptualization of personal, interpersonal, and transpersonal identity that is utilized to consciously alter interactions with the environment (Cloninger, Svrakic, and Pryzbeck, 1993).

Kiersey (1998) further cited that temperament is a predisposition to behave in certain ways and was first outlined by Hippocrates about 370 B. C. and was further refined by the Roman physician Galen around 190 A. D. Over the years, temperaments have been given a lot of names, including sanguine, melancholic, choleric, and phlegmatic. Allport in 1937 asserted that temperament is the raw material from which personality is fashioned.

Temperament is the behavior style or how of behavior as contrasted with the abilities, or what of behavior, and the motivations, or why of behavior. It is n-dimensional. Temperament is the characteristic phenomenon of an individual's emotional nature, including his susceptibility to emotional stimulation, his customary strength and speed of response, the quality of his prevailing mood, and all the peculiarities of fluctuation and intensity of mood. It determines and is the result of unique combinations of personality preference. It can denote a moderation or unification of otherwise disparate forces, a tempering or concession of opposing influences, an overall coloration or tuning a kind of thematization of the whole, a

uniformity of the diverse (Chesss and Thomas, 1991; Talwar, Nitz and Lemer, 1991; Zarghani, 1998).

But what are the factors that can influence the personality temperament of an individual? According to Limpingco and Tria (1991), the origins of personality include genetics, socio-cultural factors, learning, existential humanistic consideration, and unconscious mechanism. Oni (2001) also noted that genetics, self-image, experiences in life, attitude and choices about those experiences, and friends have significant effect on personality. Within these factors, this study specifically focuses on the influence of personal characteristics and Adversity Quotients ® on the personality temperament traits of educators.

### **Background of the study**

No one can deny that in the different stages of life, people encounter or face different hardships, difficulties, challenges, adversities, sorrows, or great losses, which are difficult to bridge. However, people do not respond in the same way to identical situations. There are some people who, despite of seemingly

insurmountable odds somehow keep going, while others are pounded down by an incessant avalanche of change. These individuals are able to consistently rise up and break through being more skilled and empowered as they go. All this reflects one's self concept, confidence in one's abilities and courage to face adverse situations. This means, that there is some measurement to determine the ability of an individual to handle adversities, which is known as Adversity Quotient®

Adversity Quotient® (AQ) is the science of human resilience (Stoltz, 2000). Resilience in psychology refers to the idea of an individual's tendency to cope with stress and adversity. This coping may result in the individual "bouncing back" to a previous state of normal functioning, or simply not showing negative effects according Masten (2009). Resilience is a dynamic process whereby individuals exhibit positive behavioral adaptation when they encounter significant adversity (Luthar, Cicchetti, and Becker, 2000)

According to Stoltz (2000), Adversity Quotient measures one's ability to prevail in the face of adversity . It explains how one responds to adverse situations, and how one rises above adversity. Stoltz

(2000) said that life is like mountain climbing and that people are born with a core human drive to ascend. Ascending means moving toward one's purpose no matter what are the goals. AQ is the underlying factor that determines one's ability to ascend.

Stoltz (2000) further indicated that “people who successfully apply AQ perform optimally in the face of adversity – the challenges, big and small, that confront us each day. In fact, they not only learn from these challenges, but they also respond to them better and faster. For businesses and other organizations, a high Adversity Quotient workforce translates to increased capacity, productivity, and innovation as well as lower attrition and higher morale.”

Stoltz (1997) further indicates that one's Adversity Quotient, the ability to prevail in the face of adversity, is comprised of four interrelated constructs CORE. These CORE include perceived control over the adversity; perceived ownership of the outcome of the adversity (regardless of its cause); perceived range or scope of the adversity (i.e.,) how far the adversity “bleeds” into other areas of one's life); and finally perceived endurance of the adversity (i.e., how long the adversity lasts).

Several factors are found to modify the negative effects of adverse life situations. Many studies show that the primary factor is to have relationship that provide care and support, create love and trust, and offer encouragement, both within and outside the family. Additional factors are also associated with resilience, like the capacity to make realistic plans, having self-confidence and a positive self-image, developing communication skills, and the capacity to manage strong feelings and impulses (Apahelpcenter.org).

Another protective factor is related to moderating the negative effects of environmental hazards or a stressful situation in order to direct vulnerable individuals to optimistic paths, such as external social support. More specifically, Werner (1995) distinguished three contexts for protective factors: (1) personal attributes, including outgoing, bright, and positive self-concepts; (2) the family, such as having close bonds with at least one family member or an emotionally stable parents; and (3) the community, like receiving support or counsel from peers.

Research has also been devoted to discovering the individual differences in resilience. Self-esteem, ego-control, and ego-resiliency

are related to behavioral adaptation (Cicchetti, Rogosch, Lynch, and Holt, 1993). Demographic information (e.g., gender) and resources (e.g., social support) are also used to predict resilience.

The ability of individuals to be resilient is important in the field of education as the constantly changing environment provides many challenges and adversities for administrators to overcome.

Education today is operating in a constantly changing environment. Advances in technology, changes in educational policy, financial limitations, changes in student demographics, and the increased call for accountability are just some of the factors that have required the field of education to respond in a manner it has never had to before ( Del Facero, 2005; Lucas, 2000).

To overcome the challenges of an ever-changing environment, it then becomes important for school administrators to be effective in operating within such an environment and have the skills necessary to be successful despite adversities. An educational leaders' adversity response plays a crucial role in the development of successful school climates and student achievement (Rosenholtz, 1989; Stoltz, 2000). Therefore, failure of school administrators to face the challenges in

life may result to more serious problems that can have detrimental effects on the success of students, teachers, parents, other stakeholders and even the whole educational institution. Adversities faced by school administrators can be a barrier to their efficient performance and the fulfillment of personal and organizational goals.

Therefore, it is important for school administrators to be well-equipped and effective at rising above and beyond adversities and for them to exhibit these characteristics in such a manner that other members of the organization reflect similar behavior.

It is within this context that this capacity of the school administrators to rise quickly from defeats, frequent frustrations, stress and setbacks as they perform their duties and responsibilities. In particular, this study aims to establish the interrelationship among adversity quotient, personal characteristics and personality-temperament traits of educators in selected private and public educational institutions in the province of Aurora.

## **Theoretical Framework**

The theoretical framework for this study is primarily anchored on the leader-trait paradigm, on the concept of Adversity Quotient, and on theories of temperament/personality.

In terms of Trait Theories of Leadership, Bass (1990) proposed two questions: (a) Which traits distinguish leaders from other people, and (b) what is the magnitude of those differences? Leadership scholars have generally examined leader traits related to demographics (e.g., gender, age, education), task competence (e.g., intelligence, Conscientiousness), or interpersonal attributes (e.g., Agreeableness, Extraversion) (Bass and Bass, 2008). Understanding the relative validity of leader traits is important because traits might not be independent. For example, there are biological and socio-cultural reasons for why men and women score differently on personality and intelligence (Feingold, 1994; Halpern, 1997). The Biological Model posits that gender differences are a function of innate differences between sexes, whereas the Socio-cultural Model posits that social and cultural factors directly produce differences.

Research suggests that leader traits related to task competence and interpersonal attributes are important predictors of leadership effectiveness ( DeRue et al., 2011). Task competence is a general category of leader traits that relate to how individuals approach the execution and performance of tasks according to Bass and Bass (2008). Although a variety of task-related personality traits have been studied, leadership scholars most often describe task competence in terms of four traits: intelligence, conscientiousness, openness to experience, and emotional stability. Intelligence reflects a general factor of cognitive abilities related to individuals' verbal, spatial, numerical, and reasoning abilities, and has been established as a consistent predictor of task performance (Hunter and hunter, 1984).

Beyond intelligence, conscientiousness, openness to experience, and emotional stability are often used to describe how one approaches and reacts to task work (Barrick and Mount, 1991). Conscientiousness reflects the extent to which a person is dependable, dutiful, and achievement-oriented, and is often associated with deliberate planning and structure. Openness to

experience is commonly associated with being imaginative, curious and open minded to new and different ways of working. Emotional stability refers to a person's ability to remain calm and not be easily upset when faced with challenging tasks.

Interpersonal attributes is a general category of leader traits that relate to how individuals approach social interactions (Bass and Bass, 2008). These traits include the interpersonal plane of personality (i.e., extraversion, agreeableness) (Costa and McCrae, 1992), as well as skills and abilities related to social functioning (e.g., communication skills) (Klimoski and Hayes, 1980).

This study is also anchored on the concept of Adversity Quotient as one leadership trait that could define emotional stability. The concept of Adversity Quotient® (AQ) was discovered by Stoltz (2000), who defined AQ as the capacity of the person to deal and respond with the adversities of life such as stress, difficulty and problem. Adversity Quotient® encompasses four dimensions which exactly measures the AQ of an individual. They are control, origin and ownership, reach and endurance embodied in the acronym CO2RE (Canivel, 2010).

The “C” in CO<sub>2</sub>RE stands for “control”. According to Stoltz (2000), “control” is the extent to which someone perceives they can influence whatever happens next. It determines resilience, health, and tenacity. It asks the question: “How much control do you perceive that you have over an adverse events?” Actual control in a given situation is nearly impossible to measure. Perceived control is much more important. From day one, nothing happens without perception of control. People who respond to adversity as temporary, external and limited have optimistic explanatory styles and tend to enjoy life’s benefits. With perceived control, hope and action are turned to reality or learned helplessness shall pass. (Canivel, 2010) . The difference between lower and higher AQ® responses on this dimension are therefore, quite dramatic. Those with higher AQ’s simply perceive greater control over life’s events than do those with lower AQ’s. As a result, they take action, which in turn results in more control (Stoltz, 2010).

The first “O” in CO<sub>2</sub>RE stands for “origin”. According to Canivel (2010), it has something to do with blame. Blame has two functions which help one to learn from and adjust behavior causing

improvement. This blame leads to guilt obliging one to search own soul and weigh the way one might have hurt others. The feeling of guilt is a powerful motivator when used properly for it can help heal real, perceived or potential damaged to an important relationship. Too much blame can be demoralizing and destructive which can destroy one's energy, hope, self-worth and immune system leading one to decide to quit. It is indicative of the level to which one or an external entity is the origin of the events, and to what degree one owns the outcomes. Those with lower AQ scores to blame themselves. Higher scores tend to properly place responsibility, and therefore also have high self-worth. An individual having low blame oneself for bad events, but with higher AQ®, an individual learn one's behavior to become smarter, better and more effective the next time similar situation is encountered.

The second "O" in CO2Re stands for "ownership". According to Stoltz (2000), "ownership" is the likelihood that someone will actually do anything to improve the situation, regardless of their formal responsibilities. It determines accountability, responsibility, action, and engagement. It asks the question: "To what degree do I own the

outcome of the adversity?” The higher an ownership score, the more there is ownership for outcomes, regardless of their cause. The lower an ownership score, the more a person disowns the outcomes, regardless of their cause. According to Canivel (2010), high AQ® people enhance their accountability to control, empower and motivate action; while low AQ® people disown the problem causing failure to act, give-up, point fingers, reduced performance and angers at other and many more negative actions. Owning the outcome reflects accountability for achieving a specific result in response to a problem. People act with great responsibility and accountability if they believe they own a piece of the result ( Stoltz, 2000).

The “R” in CO2RE stands for “reach”. According to Stoltz (2000), “reach” is the extent to which someone perceives an adversity will “reach into” and affect other aspects of the situation or beyond. It determines burden, stress, energy, and effort; it tends to have cumulative effect. It asks the question: “how far will the adversity reach into other areas of my life?” Lower AQ® response allow the adversity to affect other aspect of one’s life leading to financial panic, sleeplessness, bitterness, distancing self from others and poor

decision making. The lower your R score, the more likely you are to catastrophize bad events, allowing them to spread. On the other hand, the higher your R score, the more you may limit the reach of the problem to the event at hand (Stoltz, 2000).

The “E” in CO2RE stands for “endurance”. According to Stoltz (2011), “endurance” is the length of time the individual perceives the situation/ adversity will last, or endure. It determines hope, optimism, and willingness to persevere. It asks two related questions: “How long will the adversity last?” and, “How long will the cause of adversity last?”. The lower your E score, the more likely you are to perceive adversity and/or its causes lasting a long time (Stoltz, 2000). People who see their ability than people who attribute failure to their effort (a temporary cause) (Canivel,2010).

Stoltz (1997) postulates that there are four simple steps involved in raising a person’s AQ, which are listen, explore, analyze and do something.

This study also finds supports on the four types of temperament according to LaHaye (1984), which described temperament as a proto-psychological interpretation of the ancient medical concept

humorism and suggests that four bodily fluids affect human personality traits and behaviors. The temperaments are sanguine (pleasure-seeking and sociable), choleric (ambitious and leader-like), melancholic (introverted and thoughtful), and phlegmatic (relaxed and quiet). Each of the four types of humours corresponded in ancient times to a different personality type. The sanguine temperament is fundamentally impulsive and pleasure-seeking; sanguine people are sociable and charismatic. They tend to enjoy social gatherings, making new friends and tend to be boisterous. They are usually quite creative and often daydream.

However, some alone time is crucial for those of this temperament. Sanguine can also mean sensitive, compassionate and romantic. Sanguine personalities generally struggle with following tasks all the way through, are chronically late, and tend to be forgetful and sometimes a little sarcastic. Often, when they pursue a new hobby, they lose interest as soon as it ceases to be engaging or fun. They are very much people persons. They are talkative and not shy. Sanguines generally have an almost shameless nature, certain that what they are doing is right. They have no lack of confidence.

The choleric temperament is fundamentally ambitious and leader-like. They have a lot of aggression, energy and/or passion, and try to instill it in others. They can dominate people of other temperaments, especially phlegmatic types. Many great charismatic military and political figures were choleric. They like to be in charge of everything. However, choleric also tend to be either highly disorganized or highly organized. They do not have in-between setups; not only one extreme to another. As well as being leader-like and assertive, choleric also fall into deep and sudden depression. Essentially, they are very much prone to mood swings.

The melancholic temperament is fundamentally introverted and thoughtful. Melancholic people often were perceived as very (or overly) pondering and considerate, getting rather worried when they could not be on time for events. Melancholics can be highly creative in activities such as poetry and art and can become preoccupied with the tragedy and cruelty in the world. Often they are perfectionists. They are self-reliant and independent; one negative part of being a melancholic is that they can get so involved in what they are doing they forget to think of others.

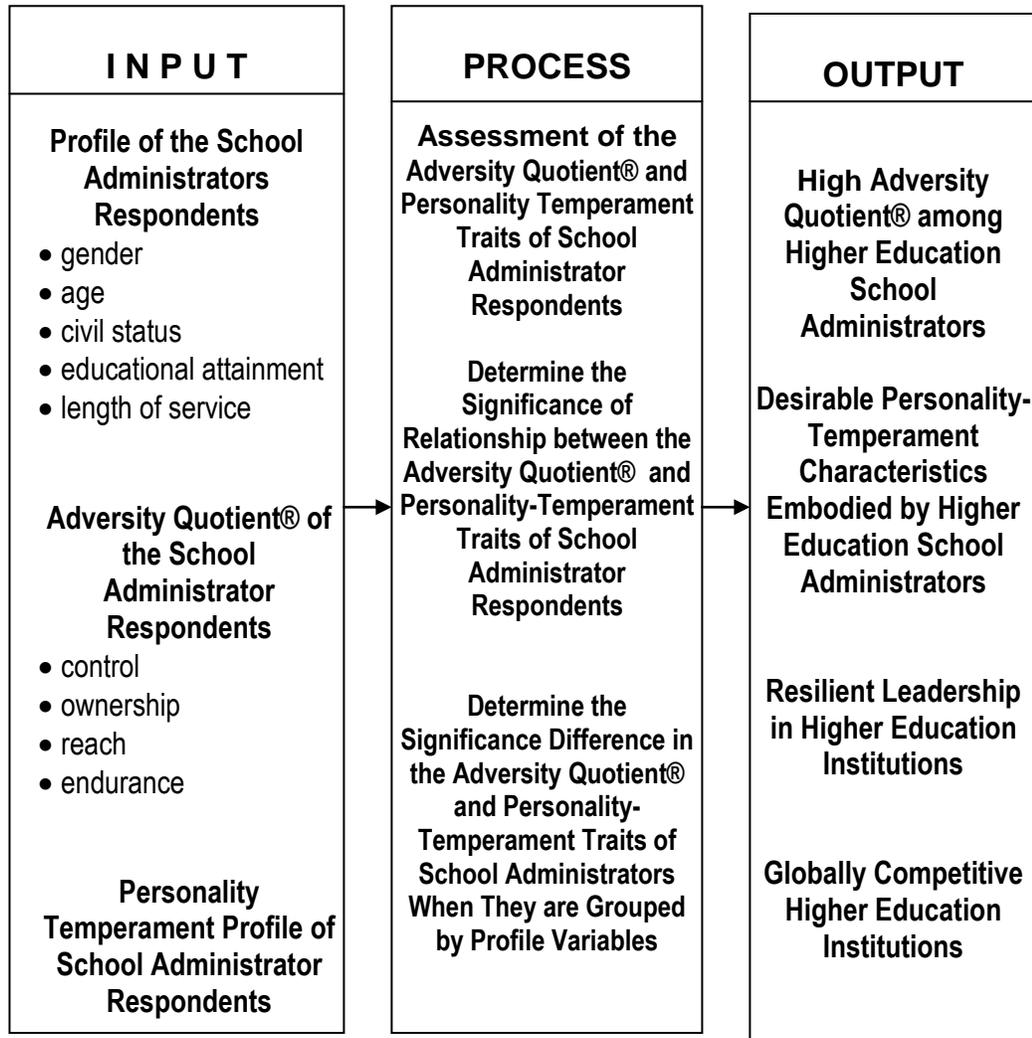
The phlegmatic temperament is fundamentally relaxed and quiet, ranging from warmly attentive to lazily sluggish. Phlegmatics tend to be contented with themselves and are kind. They are accepting and affectionate. They may be receptive and shy and often prefer stability to uncertainty and change. They are consistent, relaxed, calm, rational, curious, and observant, qualities that make them good administrators. They can also be passive-aggressive.

Every individual is a combination of the four temperaments, which means that a person may find out his or her temperament blend by assessing his or her primary and secondary temperaments.

### **Research Paradigm**

The research paradigm of the study is illustrated in Figure 1.

The inputs of the study included the profile, adversity quotient, and personality-temperament profile of the educator respondents. Their profile was described in terms of gender, age, civil status, educational attainment, and length of service. The Adversity Quotient® of the school administrator respondents was assessed in terms of the following dimensions, control, ownership, reach, and



**Figure 1**  
**Research Paradigm**  
**Adversity Quotient and Personal Characteristics as Correlates of the**  
**Personality-Temperament Traits of School Administrators in**  
**Selected Higher Education Institutions**

endurance. The personality temperament profile of the school administrators was determined based on the following four temperaments: sanguine, choleric, melancholic, and phlegmatic.

This study carried out the following processes: assessment of the Adversity Quotient® and personality temperament traits of school administrator respondents; to determine the significance of relationship between the Adversity Quotient® and personality-temperament traits of school administrator respondents; and to determine the significance difference in the Adversity Quotient® and personality-temperament traits of school administrators when they are grouped by profile variables.

A self-assessment of the educator's Adversity Quotient® will allow them to discover their strengths and weaknesses leading to self-improvement towards having a high AQ®. With high Adversity Quotient®, school administrators can apply desirable personality-temperament traits to be more resilient in responding to challenges faced by educators in order that these institutions will be able to accomplish its goal of becoming globally competitive.

## **Statement of the Problem**

The major purpose of this study is to examine the interrelationships among the Adversity Quotient®, personal characteristics and personality-temperament traits of educators in selected private and public educational institutions.

Specifically, answers to the following questions were sought:

1. What is the profile of the school administrator respondents in terms of the following:

- 1.1 gender;
- 1.2 age;
- 1.3 civil status;
- 1.4 educational attainment; and
- 1.5 length of service?

2. What is the Adversity Quotient® of the respondents as measured by the following dimensions:

- 2.1 control;
- 2.2 ownership;
- 2.3 reach; and
- 2.4 endurance?

3. What is the personality temperament profile of the respondents?

4. How significant is the relationship between the Adversity Quotient® and personality-temperament traits of the respondents?

5. How significant is the difference in the Adversity Quotient® of the respondents when they are grouped by their profile variables?

6. How significant is the difference in the personality-temperament traits of the respondents when they are grouped by their profile variables?

### **Hypotheses**

The following hypotheses were tested in this study at .05 level of significance:

1. There is no significant relationship between the Adversity Quotient® and personality-temperament traits of the educator respondents.

2. There is no significant difference in the Adversity Quotient® of the educator respondents when they are grouped according to their profile variables.

3. There is no significant difference in the personality-temperament traits of the educator respondents when they are grouped by their profile variables.

### **Significance of the Study**

This study is relevant since according to Stoltz (1997), individual adversity response is learned; and therefore, can be changed and improved. Hence, findings of this study will primarily help increase knowledge about Adversity Quotient® which can help school administrators, teachers and other educational stakeholders to be more resilient in facing challenges. In particular, the result of the study would benefit the following:

**School Administrators.** This study will provide valuable and deeper understanding and insights for school administrators/principals in understanding their capacity to stay strong and be focused and resilient amidst adversities, challenging tasks, and responsibilities of being a leader. This will lead to self-improvement for them to respond effectively to any adversity and thus

will help create a more relaxed and more productive institutional climate.

**Curriculum Developers.** Findings of this study will provide curriculum developer with valuable inputs to include and consider such as findings on Adversity Quotient® and personality-temperament traits of leaders in developing the curriculum.

**Department of Education Officials.** Results of this study will provide an opportunity for educators and DepEd officials in understanding the Adversity Quotient® of an individual and some aspects of the personality-temperament traits of school administrators which may require attention or enrichment and can serve as basis in planning and designing new training programs integrating the concepts of resiliency, creativity, drive and perseverance in dealing with adversity in the workplace.

**Policymakers.** Policymakers can obtain data from the study that can be codified for use in the formulation of policies relative to the organization and operation of the schools.

**Classroom Teachers/Academic Heads and Staff.** This study will also encourage academic heads, classroom teachers and staff to

reflect on their Adversity Quotient® and personality-temperament traits as bases for self-improvement in helping them develop their potential and leadership skills.

**Students.** Students will be given more opportunities to be the center of an improved teaching-learning process through a school administrator/educator with higher Adversity Quotient® and desirable personality-temperament traits.

**Other Researchers.** This study may provide other researchers with basis and future reference in undertaking further studies along this line.

### **Scope and Delimitation of the Study**

The scope of this study was limited to the Adversity Quotient® and personal characteristics as correlates of the personality temperament traits of educators in selected public and private educational institutions in the Province of Aurora.

The Adversity Quotient® profile of educators was measured through the AQ®P instrument of Dr. Paul G. Stoltz (2009).

The personality-temperament traits of educators were categorized according to the four temperaments discussed by LaHaye (1984), which are: sanguine, choleric, melancholic, and phlegmatic.

Differentiating factors of the Adversity Quotient® and personality-temperament traits of educators were their personal characteristics of gender, age, civil status, educational attainment and length of service.

The study was conducted during Academic Year 2012-2013.

### **Definition of Terms**

To facilitate a better understanding of this study, the following terms were conceptually and operationally defined:

**Adversity.** This term refers to any difficulty or hardship that an individual encounters arising from the workplace which is the school.

**Adversity Quotient®.** This term refers to the total score obtained on the Adversity Quotient Profile developed by Dr. Paul Stoltz version 8.1 (2009) as a measure on how one handles adversity.

**Adversity Quotient® Profile.** This term refers to a self-rating questionnaire on-line designed by Dr. Paul Stoltz (2009) to measure an individual's style of responding to unfavorable situations and consisted of four dimensions.

**Choleric Temperament.** This is one of the four temperaments considered in this study, which is described as fundamentally ambitious and leader-like. Choleric people have a lot of aggression, energy, and/or passion, and try to instill it in others.

**Control.** This is a dimension of the Adversity Quotient® Profile which measures the degree of control one has over a difficult event.

**Endurance.** This is a dimension of the Adversity Quotient® Profile which measures the length of time over which good and bad events and their consequences will last.

**Melancholic Temperament.** This is one of the four temperaments considered in this study, which is described as fundamentally introverted and thoughtful. Melancholic people often were perceived as very (or overly) pondering and considerate, getting rather worried when they could not be on time for events.

**Ownership.** This is a dimension of the Adversity Quotient® Profile which measures the extent of origin and ownership of the difficult situations, ones responsibility and accountability for improving the situations.

**Phlegmatic Temperament.** This is one of the four temperaments considered in this study, which is described as fundamentally relaxed and quiet, ranging from warmly attentive to lazily sluggish. Phlegmatics tend to be content with themselves and are kind. They are accepting and affectionate.

**Reach.** This is a dimension of the Adversity Quotient® Profile which measures the degree on how good and bad events get in touch into other areas of life.

**Sanguine Temperament.** This is one of the four temperaments considered in this study, which is described as fundamentally impulsive and pleasure-seeking; sanguine people are sociable and charismatic.

**Temperament.** This refers to the characteristic phenomena of an individual's emotional nature, including his susceptibility to emotional stimulations, his customary strength and speed of

response, the quality of his prevailing mood, and all peculiarities of fluctuation and intensity in mood (Allport, cited in Strelau, 1998).

## **CHAPTER 2**

### **REVIEW OF RELATED LITERATURE AND STUDIES**

This chapter presents a review of foreign and local literature and studies which are related to the present study. These reviewed materials served to strengthen the theoretical frame of reference on which this study was premised.

#### **Related Literature**

##### **Foreign**

The terms temperament and personality are often used interchangeably by theorists and laypersons alike. The understanding of temperament/personality has evolved greatly over time. As far back as the ancient Greeks, taxonomies and temperaments were employed to describe the character of the individual. Plato (4<sup>th</sup> century B.C.) described characteristics such as anxiety and impulsivity. Hippocrates (4<sup>th</sup> century B.C.) and Galen (2<sup>nd</sup> century A.D.) attempted to explain individual characteristics as the embodiment of

Empedocles' (5<sup>th</sup> century B.C.) doctrine of the four elements (earth, air, fire and water). In particular, Hippocrates and Galen are credited with describing individual differences based on the bodily balance of the four humors (choler or yellow bile, melancholy or black bile, phlegm, and blood) (Fruehstorfer, 2010).

Allport (1961) succinctly articulated the position held by many temperament theorists and defined temperament as:

“the characteristic phenomena of an individual's emotional nature, including his susceptibility to emotional stimulations, his customary strength and speed of response, the quality of his prevailing mood, and all peculiarities of fluctuation and intensity in mood; these phenomena being regarded as dependent upon constitutional make-up, and therefore largely hereditary in origin (cited in Strelau, 1998, pg. 29).

Newberry, Clark, Strelau, Angleitner, Hollinger-Jones and Elias (1997) stated that temperament is at least partly distinct from personality and that temperament variables appear to concern the “how” of behavior, whereas personality describes the “what” of behavior. Yet, even Eysenck (1991) and Gray (1991), who are considered by many to be icons in the area of temperament, often

considered the terms personality and temperament to mean the same thing.

Kagan and Snidman (2004) suggested that temperament is a precursor to personality – comprising individual differences before life experience build a retaining wall around the young child's biology.

Strelau (1983) provided this differentiation between temperament and personality features:

1. Temperament is to a very great degree a result of biological evolution, while personality is a product of temperament and socio-historical circumstances.

2. Temperament characterizes animals as well as humans, while personality is a specifically human mental phenomenon.

3. Constitutional anatomical-physiological structures form the basis of temperament. Therefore, an individual possesses definite temperamental features at birth. Personality is formed through activity, via interactions between the person and his/her environment. Thus, an individual does not have a personality at the earliest stages of development.

4. Temperament includes formal behavioral traits only, manifested in all kinds of reactions and actions independent of content. Personality, then, primarily provides for the content of behavior, expressing the relation of a person to the world and to himself or herself.

5. Temperament traits are not subject to moral evaluation (i.e., different temperamental types are equally “good” from the standpoint of ethics or virtue). An individual’s personality, in contrast, may be evaluated by comparing it with moral values, which in turn depend on the norms accepted in a society.

In discussing Adversity Quotient®, this is grounded on the three main foundations, which are psychoneuroimmunology, neurophysiology, and cognitive psychology. Psychoneuroimmunology is a field of investigation on how emotions and thoughts might affect body and health. While neurophysiology is all about studies on how the brain functions and learns during formation of habits. Lastly, cognitive psychology is a big aspect of psychology which focusing on relationships between thoughts and feelings associated with healthiness of mental. This field can be further divided into several

subjects, for instance, learned helplessness theory, hardiness, resilience, attribution, self-efficacy and many more (Stoltz, 1997).

Stoltz (1997) discovered Adversity Quotient® (AQ) to be a better indicator in achieving success rather than Intelligence Quotient (IQ), education or even social skills. Hundreds of studies supported the role of AQ® in determining one's ability to withstand adversity and to triumph over it.

As indicated by Stoltz (2000), Adversity Quotient® (AQ) is the science of human resilience. Resilience is most commonly understood as a process, and not a trait of an individual. It is sometimes referred to as 'posttraumatic growth' or 'steeling effects' where is the experience adversity leads to better functioning (much like an inoculation gives on the capacity to cope well with future exposure to disease) (Rutter, 2008).

Leaders are under mounting pressure to measure and substantiate their investments and efforts. Whereas, it was once good enough to provide business-relevant training, a person must now demonstrate the impact the training has upon the enterprise. The

same mandates apply to investments in new hiring methods or organization-wide initiatives (Stoltz, 2000).

Adversity Quotient® can influence all facets of human endeavor. It can be validly and reliably measured, tell a person how well he or she withstands adversity and measures ability to surmount any crisis, can be permanently rewired and improved. It also determines the value people receive from training, can be a valid predictor of sales, performance, agility, problem solving and long term success, and can also be used to reduce turnover and improve hiring, predict who will quit and who will climb, and plays a powerful role in all relationships.

Resilience is best understood as a process. It is often mistakenly assumed to be a trait of the individual, an idea more typically referred to as “resiliency” (Masten, 1994). Most research now shows that resilience is the result of individuals being able to interact with their environments and the processes that either promote well-being or protect them against the overwhelming influence of risk factors (Zautra, Hall, and Murray, 2010). These processes can be individual coping strategies, or may be helped along by good families,

schools, communities, and social policies that make resilience more likely to occur (Leadbeater, Dogen and Solarz, 2005). In this sense “resilience” occurs when there are cumulative “protective factors”. These factors are likely to play a more and more important role the greater the individual’s exposure to cumulative “risk factors.”

### **Local**

Since this study is focused on leadership of selected private tertiary educational institutions, a brief overview of higher education in the Philippines is presented.

Philippine higher education is uniquely characterized by the presence of a big number of private higher education institutions and a small number of publicly-funded universities and colleges. Although higher education is not free and compulsory, it is still very extensive enrolling about 2.5 million students in more than 10,000 academic programs and 1,718 higher education institutions all over the country. The private higher education sector in the Philippines is composed of sectarian and non-sectarian institutions. Sectarian institutions are run by religious organizations generally either Catholic or Protestant.

Because about 85% of the population is Catholic, there are more Catholic private institutions of higher learning than those established by the other religious groups combined. Catholic private higher education institutions are also perceived to be performing very well. Non-sectarian institutions are those, which are owned by private corporations.

Philippine higher education institutions offer a wide variety of degree programs, associate, diploma, baccalaureate, graduate degree courses at the master's and doctoral levels. The length of study for baccalaureate degree is for four (4) years except for engineering (5 years), dentistry and veterinary medicine for six (6) years, law (8 years) and medicine (8 years). An undergraduate degree is required for admission to law and medicine.

The Philippine academic year begins in June and ends the following March. Most universities and colleges conduct schools for two semesters. A few universities conduct classes in trimester and quarter system basis. Students enjoy English instructions both at the undergraduate and graduate levels (Valenzuela, 2005).

Leadership plays an important part in any human group undertaking in the higher education sector. Aquino (2000) broadly defined leadership as the relationship between an individual and a group built around some common interest wherein the group behaves in a manner directed or determined by the leader. The leader, thus, becomes the interpreter of the interests and objectives of the group, as the group in turn recognizes and accepts the interpreter as its spokesperson.

Endriga (2008) emphasized that current and future leaders must recognize that the major trends in globalization, technology, trade and geopolitical alignments have caused profound changes in economic activity, consumer behavior and lifestyles, industry structures, the nature of management and relationships among nations. The mindset of change, transparency, reform and transformation must replace outdated thinking that leaders can survive with patronage, dependency and apathy.

A leader is one who influences and directs others. He assumes responsibilities to motivate his workers, encourages them, inspires them, communicates with them, and helps them attain their goals.

Components of leadership are morale, discipline and proficiency (Avelino and Sanchez, 1996).

Corrales (2007) stressed that the ability to build strong relationships is the universal prerequisite for becoming a great leader. Without that ability, no personal trait would consistently lead to great leadership. Not one trait can explain great leadership, not even empathy. A trait is a personal quality; while leadership is an interpersonal ability. It includes the personal, but transcends it.

Effective leadership requires influence. To have influence, one needs to have a strong relationship. Therefore, the relationship component of leadership is its core feature. Leaders who see relationship building as the “soft” stuff of organizational building will neglect the most important ingredient of their craft. They will relegate the relationship to the level of a “necessary nuisance.” These leaders will always encounter leadership puzzles they cannot understand. They are so goal-focused they will miss the “water” in which live. Like fish, they will not realize that people require healthy water to draw life-giving oxygen. The relationship is the water. This relationship is the most single important factor in promoting productivity.

The personality-temperament of a leader defines how he leads. According to Avelino and Sanchez (1996), personality is the conglomeration of the following components of the individual: physical self, intelligence, character traits, attributes, habits, interest, personal discipline, moral values, principles and philosophies in life, as well as his idiosyncrasies. Simply, it refers to the total person in his overt and covert behavior that includes the many factors of his being, his social, mental, emotional, intellectual and physical aspects. It is also the reflection of the inner self of an individual, and therefore, it strongly influences through his behaviors and his interrelationships with other individuals.

On the other hand, personality traits is a dimension of personality that is used to categorize individuals according to the degree to which it manifest its functioning to a high degree of consistency in an individual's behavior (Avelino and Sanchez, 1996).

Kahayon and Aquino (1999) the term personality is taken from the Latin term *Persona* meaning "mask" which were first used in Greek drama, and latter adopted by Roman players. While it originally referred to masks used in comedy or tragedy to distinguish the roles

of Roman players and therefore, to the external and superficial aspects of the individual, it has now come to refer more to the central and enduring aspects of the individual.

Kahayon and Aquino (1999) effective personalities are not developed in a night, so to speak. Each person desiring to improve his personality, must strive to equip himself with a program of self-improvement and must stick to it no matter what. Through patient application and effort, one can develop characteristics that we have judged as attractive or unattractive in others and which we can adapt in our own behavior patterns. Some of the positive steps to take if we wish to improve ourselves are the following:

1. Self-appraisal. Begins by listing down and evaluating your physical, intellectual, social and emotional traits in terms of effectiveness, ineffectiveness or partial effectiveness.

2. Effective regulation of emotional life. One must develop a high degree control over one's emotions and not allowing one's emotions to control you. Negative or unpleasant emotions like fear, envy, pride, etc. should be checked or sublimated; the positive emotions like joy, love, reverence, etc. should be developed.

3. Social relations. One should be capable of social intimacy – forming friendships and participating in social relations that are deeper than mere acquaintances. Social competence consists of being able to actualize one's own needs.

4. Work. One must be committed to some form of work that is satisfying as well as economically good. Keep busy and indulge in worthwhile hobbies.

5. Love and sex. One must be able to forego personal gratification, even sexual gratification, to satisfy the loved one. Love consists of thinking more of other people rather than one's own self.

6. Self. One must have a positive regard of one's self as a distinguished part of the world he lives. One should have a well-developed ego identity and should know who he is, where he is going and should have an inner assurance that he will be recognized and accepted by those who count.

7. Philosophy of Life. One should live by philosophy of life that should give direction to one's actuations. One good philosophy is to do well, to do good and to be liked.

## **Related Studies**

### **Foreign**

The purpose of Wu's (2009) study was to discuss the situations, differences and related situations of adversity quotient and campus crisis management for the educators in elementary schools. In order to complete this study, the study starts with literature analysis, questionnaire survey, and collection and analysis of data. The questionnaire was performed on 400 elementary school educators in 39 elementary schools in Kaohsiung Country. The software SPSS v.12 was used to statistically analyze data using t-test, one-way ANOVA, product-moment correlation and multiple regression analysis.

The results of analyzed data revealed that the adversity quotient of elementary school educators in Kaohsiung Country is in the medium high range. However, it is easily effected other part of life due to the distress. The elementary school educators in Kaohsiung Country need to establish the conceptions of guidance and assistance for campus crisis management. The elementary school educators in Kaohsiung Country who are males, serve over 11 years,

graduated from graduate school, administrative staffs, home-room teachers and had experience for handling crisis have higher adversity quotient. The elementary school educators in Kaohsiung County who are males, serve over 6 years, graduated from graduate school, administrative staffs, home-room teachers and had experience for handling crisis perform much better in campus crisis management. There is close relation between the level of adversity quotient and campus crisis management. Adversity quotient can be the reference for projecting the ability of campus crisis management.

The study of Dai (2009) aimed to explore the high tech industry employees in terms of the following: (1) the relationship among adversity quotient, job stress, perceived organizational support and role performance. (2) the adversity quotient as a mediator between the job stress and role performance.(3) the moderating effect of perceived organizational support to job stress and role performance. For the purposes of the study, the questionnaire survey was conducted for the employees in the south high tech industry. A total of 111 supervisor questionnaires and 333 staff questionnaires were distributed to 44 high tech firms, where the role performance

questionnaires were designed for pairs of supervisor and employees. One hundred ten (110) supervisor questionnaires and 330 staff questionnaires were returned and, after 2 supervisors' and 12 invalid staffs' questionnaires were eliminated, a total of 108 supervisor and 318 staff valid sets of questionnaires have been collected in this study. The response rate of the valid questionnaires is 96.36%.

The study adopted the following statistical analysis techniques: the confirmatory factor analysis(CFA), the reliability analysis, the descriptive statistics, the independent t-test, the one-way ANOVA, the structural equation, modeling (SEM), the correlation analysis , and the hierarchical regression analysis.

The primary findings of the study showed that adversity quotient has significantly negative effect on job stress. Adversity quotient has significantly positive effect on role performance. Job stress significantly negative effect on role performance. Job stress has mediating effect on the relationship between adversity quotient and role performance. 5. Perceived organizational support does not have significantly moderate effect between the job stress and role performance. This study concludes by discussing for the implications

of major findings, which would be a reference to the academy and industries, and make suggestions for further studies.

Haller (2005) conducted a hermeneutic phenomenological study to investigate the possible relationship or impact that adversity, obstacles, and challenges had on the shaping and development of prominent leaders. The sixteen research participants were two current U.S. Senators, a retired U.S. Army Special Forces Major General, a president of a large educational foundation who previously was chancellor of one large university and president of another, several well-known authors and motivational speakers, two Billionaires, and the Chairman and Chief Executive Officers of six major companies.

The nine primary participants, prior to becoming prominent leaders, experienced various degrees of adversity in their youth and adult lives. These difficult experiences included being a Holocaust victim and being interned in a Nazi concentration camp at age 7; seeing his mother killed in front of him at age 14; two tours of duty in U.S. Special Forces in Vietnam; losing a right arm in battle in World War II; the premature death of a parent; discrimination including

racial, gender ,or age; death of a business partner; going broke in businesses; take-over attempts of his business; losing an election; personal relationship strife or divorce; coping with dysfunctional and deceitful regulators; being investigated by regulatory and legislatures who had their own political agendas; extreme poverty; and other adversities.

Several themes became apparent during the interviews and in the explication of the data, including the following: (a) early adversity in their youth, while important, was not the important of seminal event in their lives; (b) obstacles and adversity were perceived as challenges which could be turned into opportunities; (c) facing adversity and successfully overcoming obstacles was important in their progression and growth as leaders; (d) having mentors to help guide, motivate, and inspire them was very important; (e) being a Servant-Leader, serving people, and being humble were essential ; (f) having a strong religious faith and or strong family ties, or both , was important and helpful; and (g) their concepts and ideas about the nature of leadership influenced their experiences heavily. This study

is significant as it demonstrates the qualities of a successful leader with respect to AQ.

A study conducted by Johnson (2005) determined the relationship between Explanatory Style and AQ and examined the existence of correlations between each of the constructs and performance in a high-adversity occupation, sales. The study involved 112 western area sales region of a leading Fortune 500 company in the computer hardware industry. The findings revealed that there was a significant relationship between AQ and performance for short-term employees.

The study of Williams (2003) examined the relationship between a principal's response to adversity and student achievement, the relationship between principal and teacher's response to adversity, and principals' perceptions of adversity in education. Using an ex post facto non-experimental research design, principal (n=17) and teachers (n=79) from the Flagstaff Unified School District of Arizona were asked to complete an Adversity Quotient (AQ) measure (Stoltz,1997). AQ scores were compared to standardized student

achievement data from the past two years. Additional qualitative data were gathered through five principal interviews.

The results of this study showed that students attained higher achievement scores in schools with higher AQ principals. The study also found that teachers' perceived control over their work environment may influence principal/teacher relationships and student achievement. These findings suggest that principal response to adversity may influence school climate, teacher self-efficacy, and student achievement. The interview data supports the quantitative findings, and adds a rich description of the manner in which the principals view educational adversity and their response to it.

The purpose of the study conducted by Low (2010) was to determine the resilience levels of university administrators, specifically academic deans and department chairs, within a state university system. This quantitative study utilized the survey method to determine the resilience levels of academic deans and department chairs within a state university system. Responses were received from 35 deans and 123 chairs, each of whom completed the Personal Resilience Questionnaire, a survey developed by Conner Partners

that measures individuals' resilience and addresses how the respondent acts, feels, or thinks given various situations. Results are provided for each of the seven characteristics of resilience: Positive Outlook, The World as a Place, Positive Coping, Self-Focused, Flexible Thoughts, Flexible Social, Organized and Proactive.

The results of the surveys illustrated the levels of resilience for both deans and chairs and compared their results against the more than 64,000 other individuals who have completed the instrument. The Partial Least Squares (PLS) regression method was then utilized in determining an individual's resilience. The researcher was thus able to identify that academic deans, on the average, exhibited higher levels of resilience than did department chairs, and subsequently that female administrators, on the average, were more resilient than males.

It was also discovered that when compared against individuals from other industries and professions that academic administrators exhibited above-average levels of resilience on almost every resilience characteristic. Furthermore, it was shown that gender, institutional type, experience, size of the college/department

supervised, parental influence, formal training and incentive were influential in determining resilience levels.

### **Local**

The study of Canivel (2010) was conducted to investigate the association between the adversity quotient, leadership style, performance and practices among the principals in private schools in the province of Rizal. Specifically, the study sought answering the following: the adversity quotient® profile of the principals; the leadership styles of the principals that emerged; the effect of AQ®P to performance and practices; the relationship between the principals' adversity quotient® with the principals' leadership styles; and relationship between the principals' adversity quotient® and leadership styles with the principals' demographic profiles.

The researcher designed three instruments and made use of an electronic AQ®P questionnaire to gather quantitative and qualitative data. Descriptive and inferential statistics were applied in the analysis of data and statistical software, SPSS version 10.0 was used.

The findings of the study were: The principals' AQ®P in private schools in Rizal has an average score which is within the AQ®P of the standard provided; among the four dimensions of AQ which are control, ownership, reach and endurance (CORE), it was ownership that pulls down to below average score and all the rest got average scores; participating leadership style emerged as best and rank number 1, followed by selling leadership style, delegating leadership style, and telling leadership style; both performance and practices have positive response to adversity quotient; that there was no correlation between the principals' adversity quotient® and the principals' leadership styles; and lastly the adversity quotient® and leadership styles of the Principals' responses has no significant correlation with demographic profiles.

Lugtu's (2010) study established the significant relationship of Adversity Quotient® and Personality-Temperament Traits of the Special Weapons and Tactics (SWAT) Police of Manila. The study used the correlation analysis method of research. The whole population of the Special Weapons and Tactics Unit (SWAT) of Manila Police District which is 92 were the respondents of the study.

The Adversity Quotient® Profile version 8.1 was utilized in determining the level of AQ® or resilience of the respondents. The findings of the study revealed that the respondents have an average level of Adversity Quotient® characterized by being able to significantly navigate life, and thus, may suffer unnecessarily due to life's frustrations and challenges. Moreover, the SWAT respondents were found to have average level in the four dimension of AQ® namely: control, origin and ownership, reach, and endurance. These signify that most of the SWAT Police are competent and unbiased enough to do their respective jobs.

The study further found that majority of the SWAT respondents had a fairly non-discriminatory and unbiased personality patterns as revealed by the Guilford-Zimmerman Temperament Survey. Most of them manifest an average level of sociability, emotional stability, thoughtfulness and masculinity. In addition, the respondents were found to have an above average level of general activity, restraint, ascendance, objectivity, friendliness and personal relations. The levels of Adversity Quotient® and personality-temperament traits

were not significantly related to the demographic characteristics of the respondents.

The main purpose of Ferrer's (2009) study was to determine the relationship of personal characteristics, leadership styles, and job satisfaction to the adversity quotient® of the academic heads of selected state colleges and universities in the National Capital Region. The researcher utilized the descriptive method using the Adversity Response Profile® (ARP) by Dr. Paul Stoltz, Leadership Style Survey by Dan Clark, and Job Satisfaction Questionnaire by Alita Roxas. These questionnaires were distributed to 121 academic heads during school year 2008-2009 in the selected State Colleges and Universities in the National Capital Region. The percentages and weighted mean were computer for the profile of the respondents in terms of personal characteristics (age, civil status, gender, educational attainment, and number of years of service), leadership style (participative, delegative and autocratic and job satisfaction level. In testing the hypothesis, the chi-square was used.

Results of the study showed that majority of the academic head respondents belong to middle range of Adversity Quotient® Control,

Ownership, Reach and Endurance dimensions. In terms of overall Adversity Quotient® level, respondents belong to average range. Majority of the respondents possess a participative style of leadership. In terms of job satisfaction, respondents are satisfied with their present job conditions. On the assessment of significant relationship between personal characteristics (age, gender, civil status, educational attainment and number of years of service) and overall Adversity Quotient® level and Control, Ownership, Endurance dimension, the study showed that there is no significant relationship, except for educational attainment and AQ® Reach dimension and of the respondents which are significantly related. The study also revealed that there is no significant relationship between leadership style and overall Adversity Quotient® level and AQ® Control dimensions which are significantly related. Moreover, the study also found out that job satisfaction and overall Adversity Quotient® and Control, Ownership, Reach and Endurance dimension are not significantly related.

Lazaro (2003) conducted a study that focused on the relationship between adversity quotient® and performance level

measured by the 360 degree feedback system among the 10 selected middle managers in the different departments of the City of Manila. The study employed descriptive, correlational-survey method and two types of instruments – Adversity Response Profile®, an adversity quotient test, and the performance evaluation instrument in obtaining information. Findings revealed that respondents have an average level or control over events that affect their lives circumstances and see adversities as temporary – rather than enduring – setbacks. Respondents sensed greater ownership regarding the outcome of adversity and they do not allow such adversity to influence other areas of their lives. The study also found out that the demographic profile variables included in this study were not significantly related to the adversity quotient® similarly to the performance level of respondents. However, there was a high correlation between adversity quotient® and performance revealed by the 360-degree feedback system. The researcher recommended that adversity quotient® be included as part of modifying the qualifications in recruiting and promoting employees. This study can also lead to include the practice of adversity quotient® in employees' training and

development to instill awareness not only of personal adversity but also of adversity which is inherent in their jobs.

Local studies which focused on personality traits are reviewed in this section.

One such study was conducted by Roxas (2007) which examined the influence of the administrators' personality traits on the teaching performance of the University of the Cordilleras. Findings revealed that the physical, social and emotional traits of the administrators influenced much the teaching performance of the faculty. Overall, the personality traits of the administrators are perceived to have much influence on the teaching performance of the faculty of the University of the Cordilleras. Only the moderator variable of gender and educational attainment of teachers affect their perception on the influence of their administrators' personality traits.

The study of Gadong (2009) was conducted to empirically establish whether or not the personality traits of public secondary school teacher influenced their efficiency in classroom management. Specifically, the investigation aimed to determine the level of desirability of personality traits, level of efficiency in classroom

management, the significant differences and influence in the 2<sup>nd</sup> Congressional District of Capiz for the School Year 2008-2009. A researcher-made, appropriately validated and pre-tested questionnaire was used to elicit data from a total of 244 randomly selected teacher respondents after proper formal requests for the survey was approved.

The research disclosed that the classroom management efficiency level of most of the 244 public secondary school teachers were described as “efficient” and this efficiency did not significantly vary between categories of variables gender, civil status, age, length of teaching experience and educational attainment except in the variable location of their school. In terms of their desirability in personality traits, the 244 teacher-respondents were found to have “desirable” personality traits; however, this desirability did not significantly vary with their gender, civil status, age, length of teaching experience, educational attainment and location of their school. The desirability of personality traits of public secondary school teachers was significantly related with their classroom management efficiency levels.

Torres (2005) embarked a study in finding out the dominant personality traits of police officers in Manila. The descriptive method was utilized by the researcher. The main tools in generating the responses are the GZTS, a standardized personality test, questionnaire and interview. The researcher used the survey questionnaire to know the problems being experienced by the Manila police officers. By convenience sampling, the research was conducted among police officers in Manila with a targeted number of 135 police officers. Out of this targeted number, only 93 were generated. The remaining 42 respondents had incomplete data while others declines to participate because they were afraid that if the results of their personality would not be positive it may affect their promotion.

Based on the summary of findings of this study, it can be concluded that married police officers and those who have children, are more restrained. Notwithstanding their duties, which are often very stressful, having their family in mind guides them in their decision-making. Police officers with a college degree provide more quality service because they become better communicators and more

effective decision makers thus, greatly minimizing the impact and number of organizational and operational stressors. Senior police officers have low restraint. Being in the position empowers them with greater responsibilities, which entails greater temptations as well. As a consequential result, they become more authoritative, individualistic, prejudiced and dogmatic. Huge responsibilities that result to stress and frustration make the police officer impulsive in making decisions and enforcing actions. Low salary ranked first among the common problems of the police officers as compared to the amount of work they have. Police officers with low salary tend to be less productive and demonstrate absenteeism.

The study of Pinto (2003) was undertaken to determine what psychological needs were associated with the personality traits of the selected Augustinian Senior Sisters in the Philippines. Forty (40) Augustinian Senior Sisters with ages ranging from 35 to 80 years were selected as respondents of the study. In terms of the number of years in religious life, the range was 3 to 52 years. For the quantitative analysis, two standardized psychological tests, Gordon Personality Profile (GPP) and Edwards Personal Preference

Schedule (EPPS) were administered to the respondents. A written questionnaire and a structured interview questionnaire were designed by the researcher to assess their experiences on perceived and addressed needs. Qualitative data were gathered through the conduct of one-on-one interviews of 12 respondents from among the 40 respondents, selected based on high scores on each of the Personality Traits (GPP).

The findings of the study are as follows: there is a significant positive correlation between Responsibility and Nurturance; Responsibility and Endurance; Emotional Stability, Sociability and Nurturance. On the other hand, there is a significant negative correlation between Ascendancy and Endurance; Sociability and Nurturance. The respondents' perceived needs such as "greater religious commitment." "faithfulness to the congregation" and "service" were all associated with Nurturance and Endurance. The respondents try to address their perceived needs by: Renewed Service and Ministry, Prayer Life, Community Support and Commitment to Religious Life.

The descriptive, comparative and correlation study of Rajendram (2001) was conducted among major seminarians in Metro Manila who were composed of two groups: the philosophers (n = 59) who were in the early stage of priestly formation and the theologians (n = 39) who were in the late stage of formation. It investigated whether there was any significant difference between the two groups in terms of religious motivation and anger management style and if there was any correlation between religious motivation and the following three variables; age, stages of formation, anger management style. The study showed that the theologians were significantly higher in the level of religious motivation than philosophers. No significant difference was noted in anger management style between the theologians and the philosophers. In terms of temperament, most of the philosophers and theologians were extroverted and Sensing Judging (SJ) individuals. All the four temperaments (sensing judging, sensing perceiving, intuitive feeling and intuitive thinking) had high-level religious motivation and there was no particular temperament that had high-level religious motivation. No correlation was found between religious motivation

and anger management style; however, there was positive correlation found among religious motivation, stages of formation and age. The findings have practical relevance for seminarians, formators, and counselors.

Tan (2000) conducted a study at Notre Dame University, Cotabato City during the school year 1999-2000. It is descriptive-correlational research on the relationship between the temperament scale and teaching efficiency of the NDU faculty. A census of 82 full-time faculty members who have met the qualifications set were taken as respondents.

The findings of this study are summarized as follows: There was a comparable number of younger and older faculty members whose length of teaching experience varied. Emotional stability and Restraint were the most favorable traits of the respondents. The least favorable was Friendliness. The respondents generally manifest satisfactory level of teaching efficiency. There was no significant relationship between each of the GZTS variables and teaching efficiency in general except for Restraint, which shows significant relation to efficiency in teaching. Restraint along with age, educational

attainment and teaching experience are statistically significant to teaching efficiency.

Cajilig (2000) conducted an investigation on the Personality Traits of Public Secondary School Teachers in the First Congressional District of Iloilo and Their Influence on Classroom Management. Findings of her study disclosed that most of the 210 public secondary school teacher-respondents were found to have “highly desirable” personality traits. Furthermore, among the four dimensions/aspects of classroom management, most of the teacher-respondents were found “highly efficient” in the dimension, guidance and directions of the learning process. Generally, however, the respondents found some degree of difficulty in the classroom management dimensions.

### **Synthesis of the Reviewed Studies**

The reviewed studies tried to explain and discover the role and the significance of the Adversity Quotient® in human performance, particularly on leadership. The reviewed studies discussed above reflect some semblance and differences with the current study but

altogether provided useful insights to the researcher about concepts of Adversity Quotient®, personality-temperament traits, and leadership behavior.

The studies of Wu (2009), Haller (2005), Johnson (2005), William (2003) and Low (2010) all dealt on topics relating to Adversity Quotient® in terms of foreign studies.

As to the local setting, the studies of Canivel (2010), Lugtu (2010), Ferrer (2009), Iazaro (2003), Roxas (2007), Gadong (2009), Torres (2005), Pinto (2003), Tan (2000) and Cajilig (2000) were the most related studies.

Although the reviewed studies may share the same views and findings regarding the factors, effects or other variables considered in the current study, they were found different from the present undertaking in terms of other variables considered, research locale, methodology and respondents.

Thus, this study can be considered first of its kind as regards the combined concepts of adversity quotient, personality traits and leadership styles in the research locale.

## CHAPTER 3

### METHOD AND PROCEDURES

This chapter presents a discussion of the method of research, respondents of the study, sampling procedure, techniques and instruments, validation of the instrument, data gathering procedures, and the statistical treatment of data.

#### **Research Method**

The study utilized the descriptive research method with the use of the questionnaire/checklist as the major instrument for gathering data. This particular method is chosen because of its appropriateness to the problem. Descriptive method allows quantitative and qualitative description of current status, traits, nature and characteristics of the subjects.

Best (1998) discussed that the descriptive method typically employs a survey or an assessment approach for its purpose is to collect information that permits one to discuss the characteristics of

persons and their perceptions. It presents facts concerning nature and status of the study. It is concerned with conditions or relationships that exist, processes that are going on and effects that are felt and trends that are developing.

### **Respondents of the Study**

The respondents of the study were educators composed of, college deans, school principals, school heads, academic heads and classroom teachers of selected private and public educational institutions in the Province of Aurora who agreed to participate by accomplishinh the on-line questionnaires needed for this study. The researcher is truly grateful to all who extended their cooperation for the success of gathering needed data.

### **Sampling Procedure**

A complete enumeration of the one hundred forty-one (141) educators from the selected public and private educational institution in the Province of Aurora was requested to participate in the study. All one hundred forty-one respondents accomplished the personality-temperament survey form. However, only 139 respondents were able to answer the AQ®P instrument. Two (2) of them did not give their e-mail addresses.

## **Instruments and Techniques**

This research made use of the following instrument and techniques:

**Questionnaire.** The major tool in the gathering of data is the questionnaire which is designed according to the specific problems of the study. Additional information was obtained using unstructured interviews.

The questionnaire is divided into three parts.

The first part aims to gather information on the profile of the school administrators in terms of gender, age, civil status, educational attainment; and length of service.

Part II aims to assess the personality-temperament profile of school administrators in terms of the four temperaments, as follows: sanguine, choleric, melancholic and phlegmatic. In scoring the personality-temperament scale, all the 1 or 2 answers were canceled out since these scores are so low such that these do not really apply to the overall scoring in each Section. Then all the 3's, 4's, & 5's in each Section were add up and the totals were written at the bottom of

each appropriate section. The section with the highest score is the primary temperament of the respondents; and the section with the second highest score is their secondary temperament. This study considered the primary temperament of the school administrators.

The third part is the electronic version of the Adversity Quotient Profile instrument of Dr. Paul G. Stoltz (2009) in his latest AQ®P online version 8.1. Respondents answered the survey using the internet, in which basic information were provided and the respondents have to enter his/her email addresses for them to access the unique URL provided by PEAK Learning for this research study. AQ®P online version 8.1 is a self rating instrument that measures an individual's style of responding to adverse situation and measure ones adversity level. The AQ®P presents 14 scenarios or events, each of which is followed by four questions to be responded to on a 5-point Likert scale. In scoring the AQ®P scores, the following are the descriptive interpretations:

	C	O	R	E	AQ
High	49-50	50	40-50	43-50	177-200
Above Average	45-48	48-49	35-39	39-42	165-176
Average	38-44	43-47	29-34	34-38	145-164
Below Average	34-37	39-42	24-28	29-33	134-144
Low	10-33	10-38	10-23	10-28	40-133
Mean	41	45	32	36	154

**Interview.** This technique was utilized in order to get a better grasp of the present situation, aside from confirming and verifying the data inputs collected from the questionnaire. This study used the questionnaire as the interview guide.

### **Validation of the Instrument**

Since the researcher requested permission from Dr. Stoltz to use his Adversity Quotient Profile® instrument, no expert validation of this instrument was conducted. On the other hand, graduate professors were requested to validate the part of questionnaire which seeks to determine the personality-temperament profile of the educators, which was adapted from the book of Tim LaHaye (1998).

All comments and suggestions of the graduate professors were incorporated in the final copy of the questionnaire. Then, the revised questionnaire was reproduced and distributed to target respondents of the study.

### **Data Gathering Procedures**

Prior to the conduct of the study, the researcher secured the permission of Dr. Paul Stoltz to use the Adversity Response Profile® in measuring the Adversity Quotient® level of the respondents. After approval of the request, the signing the Terms of Agreement was done. The researcher prepared the letters of request for concerned school administrators of the selected public and private institutions seeking permission to conduct the study in the selected schools.

After approval of the request, the researcher personally administered and retrieved the questionnaires from the target respondents.

For the on-line survey (Adversity Quotient Profile®) a unique URL given by PEAK Learning was provided to the respondents for them to access the survey.

The gathered data were classified, encoded and summarized. Then, the researcher analyzed and interpreted the findings of the study following the sequence of the problems posed in Chapter 1 with the help of a statistician.

### **Statistical Treatment of Data**

The following statistical tools and techniques were used to ensure the valid and systematic presentation, analysis and interpretation of data: frequency and percentage, arithmetic mean, t-test for independent samples, one-way analysis of variance (ANOVA), Pearson Product Moment Correlation, and chi-square test.

**Percentage.** This was used as a descriptive statistics to describe the relationship of a part to whole. The formula is:

$$\% = \frac{f}{N} \times 100$$

where:

% = percentage,

f = frequency of responses, and

N = total number of respondents.

**Arithmetic Mean.** This was computed to determine the mean or average score of the Adversity Quotient® profile of the school administrator respondents. The formula is:

$$\bar{X} = \frac{\Sigma X}{n}$$

where:

$$\bar{X} = \text{mean,}$$

$$\Sigma X = \text{sum of the scores, and}$$

$$n = \text{number of cases.}$$

**t-test for independent samples.** This was used to determine the significance of difference in the Adversity Quotient® profile of the school administrator respondents when they are grouped by gender, civil status and educational attainment. The formula is:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{N} + \frac{S_2^2}{N}}}$$

where:

$t$  = test statistic value,

$\bar{X}_1$  = mean of the first group,

$\bar{X}_2$  = mean of the second group,

$S_1^2$  = variance of the first group,

$S_2^2$  = variance of the second group, and

$N$  = total number of cases.

**One-Way Analysis of Variance (ANOVA).** This was used to determine the significance of difference in the Adversity Quotient® profile of the respondents when they are grouped by age and length of service. The formulas are:

For the Sum of Squares:

a) Total Sum-of-Squares (SST)

$$SST = \sum X^2 - \frac{(\sum X)^2}{N}$$

b) Between Sum-of-Squares (SSB)

$$SSB = \sum \frac{(\sum X)^2}{N} - \frac{(\sum X_T)^2}{N}$$

c) Within Sum-of-Squares (SSW)

$$SSW = SST - SSB$$

For the degrees of freedom (df)

$$df_T = N - 1 \quad \text{where: } N = \text{number of cases}$$

$$df_b = k - 1 \quad k = \text{number of groups}$$

$$df_w = N - k$$

For the Mean Square

a) Mean Square for Between Groups (MSSC)

$$MSSC = \frac{SSB}{df_b}$$

b) Mean Square for Within Groups (MSSE)

$$MSSE = \frac{SSW}{df_w}$$

For the f-value

$$f = \frac{MSSC}{MSSE}$$

**Pearson Product Moment Correlation (r).** This was used to determine the significance of relationship between the Adversity Quotient® and personality-temperament traits of the respondents.

The formula is:

$$r = \frac{N (\sum XY) - (\sum X) (\sum Y)}{\sqrt{N (\sum x^2) - (\sum x)^2} \sqrt{n (\sum y^2) - (\sum y)^2}}$$

where:

$r$  = the Pearson coefficient of correlation between variables X and Y,

X = mean score of the respondents measuring their assessment on the first variable,

Y = mean score of the respondents measuring their assessment on the second variable, and

N = the number of paired observations.

The Pearson coefficient of correlation,  $r$ , was interpreted based on the following scale:

Pearson coefficient, $r$	Interpretation
$\pm 0.90$ to $\pm 1.00$	Very High Correlation
$\pm 0.70$ to $\pm 0.89$	High Correlation
$\pm 0.40$ to $\pm 0.69$	Moderate Correlation
$\pm 0.20$ to $\pm 0.39$	Low Correlation
Less than $\pm 0.20$	Negligible Correlation

To test the significance of the Pearson coefficient of correlation,  $r$ , the following formula was used:

$$t = r \sqrt{\frac{n - 2}{1 - r^2}}$$

where d.f. =  $n - 2$

**Chi-Square ( $\chi^2$ ) Test.** This test statistic was used to determine the significance of difference in the personality temperament profile of the respondents when they are grouped by profile variables. . The formula is:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

where:

$\chi^2$  = chi-square,

O = observed frequency, and

E = expected frequency.

## **CHAPTER 4**

### **PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA**

This chapter presents, analyzes, and interprets the data gathered from the survey questionnaire which focused on the interrelationship among the Adversity Quotient®, personal characteristics and personality-temperament traits of educators in selected public and private educational institutions. The findings of the study are organized into six parts.

The first part shows the profile of the educator respondents in terms of gender, age, civil status, educational attainment and length of service.

Part two describes the Adversity Quotient® Profile of the educator respondents as measured by the following dimensions: control, ownership, reach, and endurance. The third part depicts the personality temperament profile of the educator respondents.

Part four establishes whether the Adversity Quotient® profile of the educator respondents is significantly related to their personality-temperament traits profile. Part five compares the Adversity Quotient® profile of the respondents when they are grouped by their profile variables.

Finally, part six compares the personality-temperament traits of the educator respondents when they are grouped by their profile variables.

## **7. Profile of School Administrator Respondents**

### **1.1 Gender**

Table 1 shows the profile of the educator respondents in terms of gender.

Table 1

Profile of Educator Respondents in  
Terms of Gender

Gender	Frequency	Percentage
Male	28	20.14
Female	111	79.86
TOTAL	139	100.00

As reflected in the table, there were 111 or 79.86% female educator respondents; and 28 or 20.14% male educator respondents.

## 1.2 Age

Table 2 presents the profile of the educator respondents in terms of age.

Table 2

### Profile of Educator Respondents in Terms of Age

Age Bracket	Frequency	Percentage
25 years and below	39	28.06
26 – 30 years	28	20.14
31 – 35 years	20	14.39
36 – 40 years	8	5.76
41 – 45 years	14	10.07
46 – 50 years	13	9.35
51- 55 years	7	5.04
56 years and above	10	7.19
TOTAL	139	100.00
MEAN	34.69	

As gleaned in the table, the largest distribution of the educator respondents, 39 or 28.06%, represented the youngest group of 25 years and below. Twenty-eight (28) or 20.14% were between 26 – 30

years old; 20 or 14.39% were between 31 – 35 years old; 8 or 5.76% belonged to the 36 – 40 years age group; 14 or 10.07% were between 41 – 45 years old; 13 or 9.35% were between 46 – 50 years old; 7 or 5.04% were between 51 – 55 years old; and 10 or 7.19% belonged to the oldest group of 56 years and above. The mean age of the educators was 34.69.

### 1.3 Civil Status

Table 3 describes the profile of the educator respondents in terms of civil status.

Table 3

#### Profile of Educator Respondents in Terms of Civil Status

Civil Status	Frequency	Percentage
Single	55	39.57
Married	81	58.27
Widow	1	0.72
Separated	1	0.72
Single Parent	1	0.72
TOTAL	139	100.00

As reflected in the table, most of the educator respondents, 81 or 58.27%, were married. Fifty-five (55) or 39.57% of the respondents were single; and an equal number of 1 or 0.72% were widowed, separated, and a single parent, respectively.

#### 1.4 Educational Attainment

Table 4 shows the profile of the educator respondents in terms of educational attainment.

Table 4

#### Profile of Educator Respondents in Terms of Educational Attainment

Educational Attainment	Frequency	Percentage
Doctoral Degree	3	2.16
M.A. with Doctoral units	4	2.88
M.A. Degree	20	14.39
With M.A. units	112	80.58
TOTAL	139	100.00

As gleaned in the table, the highest educational attainment of the majority of the educator respondents, 112 or 80.58%, was some units earned in their Master's degree program. Twenty (20) or

14.39% of the respondents were Master's degree holders; 4 or 2.88% had earned some doctoral units; and 3 or 2.16% were doctoral degree holders.

### 1.5 Length of Service

Table 5 presents the profile of the educator respondents in terms of length of service.

Table 5

Profile of Educator Respondents in  
Terms of Length of Service

Length of Service	Frequency	Percentage
1 – 5 years	71	51.08
6 – 10 years	19	13.67
11 – 15 years	10	7.19
16 – 20 years	10	7.19
21 years & above	29	20.86
TOTAL	139	100.00
Mean	9.65	

As shown in the table, 71 or 51.08% of the educator respondents had 1 – 5 years of experience in the field of education. Nineteen (19) or 13.67% had 6 – 10 years length of service; 10 or

7.19% had 11 – 15 years length of service; and another 10 or 7.19% had 16 – 20 years length of service. School administrators with the longest years of service of 21 years and above numbered 29 or 20.86%. The mean length of service of the school administrators was 9.65 years.

Based on the findings in Tables 1 to 5, the educator respondents can be described as mostly female, in their mid-thirties, and married. They have pursued post-graduate studies and most have around ten years of work experience in the field of education.

## **8. Adversity Quotient of Respondents**

### **8.1 Control**

Table 6 shows the Adversity Quotient® profile of the educator respondents in terms of the control dimension.

As reflected in the table, 6 or 4.32% of the educator respondents scored “above average” and 47 or 33.81% scored “average in the control dimension. However, the larger distribution of the respondents scored below average with 48 or 34.53% educator. A considerable number, 38 or 27.34%, scored low in this dimension.

Table 6  
Adversity Quotient® Profile of Educator Respondents  
in Terms of Control Dimension

Descriptive Rating	Frequency	Percentage
Above Average (45 – 48)	6	4.32
Average (38 – 44)	47	33.81
Below Average (37 – 37)	48	34.53
Low (10 – 33)	38	27.34
TOTAL	139	100.00
Computed Mean	36	
Standard Mean	41	
Descriptive Rating	BELOW AVERAGE	

The computed mean score of the respondents was 36 and this was below the standard mean score of 41, which reflects a “below average” rating of the educator in the control dimension. This finding suggests that most of the educator respondents usually feel helpless in the face of adversity.

## 8.2 Ownership

Table 7 presents the Adversity Quotient® profile of the educator respondents in terms of the ownership dimension.

Table 7  
Adversity Quotient® Profile of Educator Respondents  
in Terms of Ownership Dimension

Descriptive Rating	Frequency	Percentage
Average (43 – 47)	25	17.99
Below Average (39 – 42)	24	17.27
Low (10 – 38)	90	64.75
TOTAL	139	100.00
Computed Mean	36	
Standard Mean	45	
Descriptive Rating	LOW	

As gleaned in the table, more than one-half of the educator respondents, 90 or 64.75%, scored low in the ownership dimension. Only 25 or 17.99% scored average in this dimension. The remaining 24 or 17.27% of the respondents scored “below average.”

The mean score of the respondents was 36 which was way below the standard mean of 45. This indicates a “low” rating of the educator respondents in the ownership dimension. This finding suggests that the educator respondents oftentimes disown the outcome of a problem, regardless of their cause. This results to

failing to act, giving up, pointing fingers, reduced performance and anger at other people and many more negative actions

### 8.3 Reach

Table 8 reflects the Adversity Quotient® profile of the educator respondents in terms of the reach dimension.

Table 8

Adversity Quotient® Profile of Educator Respondents  
in Terms of Reach Dimension

Descriptive Rating	Frequency	Percentage
High (40 – 50)	4	2.88
Above Average (35 – 39)	13	9.35
Average (29 – 34)	58	41.73
Below Average (24 – 28)	38	27.34
Low (10 – 23)	26	18.71
TOTAL	139	100.00
Computed Mean	29	
Standard Mean	32	
Descriptive Rating	BELOW AVERAGE	

As shown in the table, there were 4 or 2.88% of the educator respondents who scored “high” in the reach dimension. Thirteen (13)

or 9.35% scored “above average” and 58 or 41.73% scored “average.” On the other hand, 38 or 27.34% of the respondents scored “below average” and 26 or 18.71% scored “low.”

The mean score of the educator respondents was 29 and this was below the standard mean of 32. This denotes a “below average” rating of the respondents in the reach dimension, which infer that most of the educator respondents often allow problems/adversities they face to affect other aspects of their lives often leading to panic and poor decision-making.

#### **8.4 Endurance**

Table 9 shows the Adversity Quotient® profile of the educator respondents in terms of the endurance dimension.

The scores of 11 or 7.91% of the educator in the endurance dimension had a “high” descriptive rating. Fifteen (15) or 10.795 of the respondents scored “above average”; and 43 or 30.94% scored “average” in this dimension.

Table 9  
Adversity Quotient® Profile of Educator Respondents  
in Terms of Endurance Dimension

Descriptive Rating	Frequency	Percentage
High (43 – 50)	11	7.91
Above Average (39 – 42)	15	10.79
Average (34 – 38)	43	30.94
Below Average (29 – 33)	55	39.57
Low (10 – 28)	15	10.79
TOTAL	139	100.00
Computed Mean	34	
Standard Mean	36	
Descriptive Rating	AVERAGE	

On the other hand, there were 55 or 39.57% of the educator respondents who scored “below average”; and 15 or 10.79% who scored “low” in the endurance dimension.

The computed mean score of 34 was within the “average” rating which indicates that most educator respondents perceive that stressful times can be dealt with as it arise.

Table 10 shows the overall Adversity Quotient® of the educator respondents.

Table 10

Overall Adversity Quotient® of Educator Respondents

Descriptive Rating	Frequency	Percentage
Above Average (165 – 176)	5	3.60
Average (145 – 164)	20	14.39
Below Average (134 – 144)	40	28.78
Low (40 – 133)	74	53.24
TOTAL	139	100.00
Computed Mean	134	
Standard Mean	154	
Descriptive Rating	BELOW AVERAGE	

The overall AQ scores of most of the educator respondents numbering 74 or 53.24% ranged from 40 – 133 and were within the “low” descriptive rating. “Below average” AQ scores were recorded by 40 or 28.78% of the respondents.

On a positive note, 5 or 3.60% of the respondents obtained scores with an “above average” descriptive rating; and 20 or 14.39% scored “average” in their overall AQ.

The computed mean score of the overall AQ of the educator respondents equaled to 134 which is below the standard mean of 154. This indicates an overall “below average” AQ of the educator respondents. This means that most of the educator respondents have less than the ideal capacity to resolve challenges difficulties, set backs and demands and to make every effort to overcome them so as not to affect their work.

### **9. Personality Temperament Profile of Respondents**

Table 11 describes the personality temperament profile of the educator respondents.

Table 11

#### Personality Temperament Profile of Educator Respondents

Personality Temperament Profile	Frequency	Percentage
Sanguine Temperament	11	7.91
Choleric Temperament	117	84.17
Melancholy Temperament	11	7.91
TOTAL	139	100.00

As shown in the table, the educator respondents demonstrated only three primary personality temperaments. Most of the educator, 117 or 84.17%, had a choleric temperament.

Eleven (11) or 7.91% had a sanguine temperament; and another 11 or 7.91% had a melancholy temperament.

It can be deduced that most of the educator respondents are fundamentally ambitious and leader-like, which are distinguishing traits of choleric.

#### **10. Relationship Between Adversity Quotient and Personality-Temperament Traits of Respondents**

Table 12 shows the results in correlating the adversity quotient and personality temperament traits of educator respondents with sanguine temperament.

In correlating the AQ and personality-temperament traits of the 11 educator respondents with sanguine temperament, the  $r$  -values of 0.065, 0.120 and 0.180 were computed in terms of the control, reach and endurance dimensions, respectively. These data denote negligible correlations which were supported by the corresponding computed  $t$ -values of 0.196, 0.362 and 0.546,

Table 12

Results in Correlating Adversity Quotient® and Personality  
Temperament Traits of educator Respondents  
with Sanguine Temperament

AQ Dimensions	Computed r value	Verbal Interpretation	Computed t value	Verbal Interpretation
Control	0.065	Negligible Correlation	0.196	Not Significant
Ownership	0.258	Low Correlation	0.802	Not Significant
Reach	0.120	Negligible Correlation	0.362	Not Significant
Endurance	0.180	Negligible Correlation	0.547	Not Significant
Overall AQ	0.231	Low Correlation	0.712	Not Significant
d.f. = 9		critical value at $\alpha_{.05} = 2.262$		

respectively, which were all lesser than the critical value of 2.262 with 9 degrees of freedom at .05 significance level.

On the other hand, low correlations were noted between the personality temperament traits of educators with a sanguine temperament and their AQ profile in terms of ownership and their overall AQ. This finding was gleaned from the computed r-values of 0.258 and 0.231, respectively. However, these correlations were not statistically significant since the corresponding computed t-values of

0.802 and 0.712 were both within the critical value of 2.262 with 9 degrees of freedom at .05 significance level.

However, considering the low correlations observed in terms of ownership and overall AQ, this infers that there is a tendency for educator with a sanguine temperament to have higher sense of accountability for outcomes of a specific result in response to a problem. Likewise, they appeared capable to deal and respond with the adversities of life. This is probably because of the nature of sanguines who are certain that what they are doing is right.

Table 13 presents the results in correlating the adversity quotient and personality temperament traits of educator respondents with choleric temperament.

As shown in the table, the personality-temperament traits of the 117 educator respondents with choleric temperament did not significantly correlate with their AQ profile in terms of the following dimensions: control ( $r = 0.018$ ,  $t = 0.188$ ); ownership ( $r = -0.060$ ,  $t = 0.642$ ); reach ( $r = -0.076$ ,  $t = 0.813$ ), and endurance ( $r = -0.027$ ,  $t = 0.292$ ) and with their overall AQ ( $r = -0.073$ ,  $t = 0.790$ ). This finding was denoted by the computed  $r$ -values which denote negligible

Table 13

Results in Correlating Adversity Quotient® and Personality Temperament Traits of Educator Respondents with Choleric Temperament

AQ Dimensions	Computed r value	Verbal Interpretation	Computed t value	Verbal Interpretation
Control	0.018	Negligible Correlation	0.188	Not Significant
Ownership	-0.060	Negligible Correlation	0.642	Not Significant
Reach	-0.076	Negligible Correlation	0.813	Not Significant
Endurance	-0.027	Negligible Correlation	0.292	Not Significant
Overall AQ	-0.073	Negligible Correlation	0.790	Not Significant
d.f. = 115		critical value at $\alpha_{.05} = 1.980$		

correlations and computed t-values which were lesser than the critical value of 1.980 with 115 degrees of freedom at .05 significance level.

Table 14 shows the results in correlating the adversity quotient and personality temperament traits of educator respondents with melancholy temperament.

Tabular results showed that the personality-temperament traits of the 11 educator respondents with melancholy temperament did not significantly correlate with their AQ profile in

Table 14

Results in Correlating Adversity Quotient® and Personality  
Temperament Traits of educator Respondents  
with Melancholy Temperament

AQ Dimensions	Computed r value	Verbal Interpretation	Computed t value	Verbal Interpretation
Control	-0.187	Negligible Correlation	0.571	Not Significant
Ownership	-0.462	Moderate Correlation	1.564	Not Significant
Reach	0.417	Moderate Correlation	1.377	Not Significant
Endurance	0.333	Low Correlation	1.058	Not Significant
Overall AQ	-0.032	Negligible Correlation	0.096	Not Significant
d.f. = 9		critical value at $\alpha_{.05} = 2.262$		

terms of the following dimensions: control ( $r = -0.187$ ,  $t = 0.571$ ) and overall AQ ( $r = -0.032$ ,  $t = 0.096$ ).

It can also be noted that although the computed r-value of -0.462, which denotes a moderate correlation, was computed when correlating the personality-temperament traits of educators and their AQ profile in terms of ownership, this correlation was not statistically significant since the corresponding computed t-value of 1.564 was

lesser than the critical value of 2.262 with 9 degrees of freedom at .05 significance level.

A moderate correlation was also observed between the personality-temperament traits of educators with melancholy temperament and their AQ profile in terms of reach based on the computed r-value of 0.417. However, this correlation was not statistically significant since the corresponding computed t-value of 1.377 was lesser than the critical value of 2.262 with 9 degrees of freedom at .05 significance level.

The same with correlating the personality-temperament traits of educators with melancholy temperament and their AQ profile in terms of endurance, a low correlation coefficient of 0.333 was computed, but this was not statistically significant since the corresponding computed t-value of 1.058 was lesser than the critical value of 2.262 with 9 degrees of freedom at .05 significance level.

Considering the strength of the correlations observed in the findings, it can be inferred that there is tendency that educators who are highly melancholic are more likely to disown the outcomes of an adversity. On the other hand, these school administrators are more

capable to limit the reach of the problem to the event at hand and tend to be quicker in perceiving and responding to adversities.

Based on the findings in Tables 12 to 14 wherein the correlations observed were not statistically significant, the null hypothesis of no significant relationship between the Adversity Quotient® and personality-temperament traits of the respondents was accepted. By and large, this infers that the personality-temperament traits of school administrators who have a sanguine, choleric, and melancholy temperaments did not significantly influence their AQ profile and vice-versa.

#### **11. Comparison of Adversity Quotient® Profile of Respondents When They are Grouped by Profile Variables**

Table 15 presents the t-test results in comparing the Adversity Quotient® Profile of the educator respondents when they are grouped by gender.

As shown in the table, no significant difference was observed in the AQ profile of the educator respondents when they were grouped by gender in terms of the following dimensions: control

Table 15

t-test Results in Comparing Adversity Quotient® Profile of Educator Respondents When They are Grouped by Gender

AQ Dimensions	Male		Female		Mean Diff.	Computed t-value	Verbal Interpretation
	Mean	SD	Mean	SD			
Control	36.71	4.413	36.12	4.620	0.59	0.617	Not Significant
Ownership	36.18	6.510	35.83	6.794	0.35	0.245	Not Significant
Reach	29.50	5.654	28.39	5.264	1.11	0.985	Not Significant
Endurance	34.18	4.907	33.58	5.718	0.60	0.511	Not Significant
Overall AQ	136.57	12.530	133.91	12.135	2.66	1.030	Not Significant
d.f. = 137				critical value at $\alpha_{.05} = 1.980$			

( $t = 0.617$ ), ownership ( $t = 0.245$ ), reach ( $t = 0.985$ ), and endurance ( $t = 0.511$ ). Likewise, the overall AQ of male and female educator did not vary significantly based on the computed t-value of 1.030 which was lesser than the critical value of 1.980 with 137 degrees of freedom at .05 significance level. This finding accepts the null hypothesis of no significant difference in the AQ profile of the respondents when they were grouped by gender. Hence, it can be deduced that gender was not a differentiating factor of the AQ profile of the educator respondents.

Table 16 presents the ANOVA results in comparing the Adversity Quotient® Profile of the educator respondents when they are grouped by age.

Tabular results showed that the AQ profile of the educator did not vary significantly when they were grouped by age. This finding was denoted by the following computed F values which were within the critical value of 3.06 with 2, 136 degrees of freedom: control (F = 0.705), ownership (F = 1.138), reach (F = 1.085), endurance (F = 0.710), and overall AQ (F = 0.588).

Based on the above finding, the null hypothesis of no significant difference in the AQ profile of the respondents when they were grouped by age was accepted. This finding implies that age was not a differentiating factor of the AQ profile of the educator respondents. Thus, regardless of age, educator have below average Adversity Quotient®, which means that most often than not, they find it hard to deal and respond with the adversities of life such as stress, difficulty and problems.

Table 16

ANOVA Results in Comparing Adversity Quotient® Profile of Educator Respondents When Grouped by Age

INDICATORS	Age Bracket	Mean	Source of Variation	Sum of Squares	Computed F Value	Verbal Interpretation
Control	30 years and below	36.34	Between Groups	29.5277	0.704	Not Significant
	31-45 years	36.67	Within Groups	2851.6378		
	46 years and above	35.40	Total	2881.1655		
Ownership	30 years and below	36.40	Between Groups	102.4848	1.138	Not Significant
	31-45 years	36.26	Within Groups	6122.1051		
	46 years and above	34.27	Total	6224.5899		
Reach	30 years and below	29.30	Between Groups	61.8870	1.085	Not Significant
	31-45 years	27.88	Within Groups	3877.1346		
	46 years and above	28.10	Total	3939.0216		
Endurance	30 years and below	33.16	Between Groups	43.9629	0.710	Not Significant
	31-45 years	33.93	Within Groups	4211.3464		
	46 years and above	34.57	Total	4255.3094		
Overall AQ	30 years and below	135.21	Between Groups	176.4850	0.588	Not Significant
	31-45 years	134.74	Within Groups	20417.8603		
	46 years and above	132.33	Total	20594.3453		
d.f. = 2,136				critical value $\alpha$ .05 = 3.06		

Table 17 shows the t-test results in comparing the Adversity Quotient® Profile of the educator respondents when they are grouped by civil status.

Table 17

t-test Results in Comparing Adversity Quotient® Profile of educator Respondents When They are Grouped by Civil Status

AQ Dimensions	Single		Married		Mean Diff.	Computed t-value	Verbal Interpretation
	Mean	SD	Mean	SD			
Control	36.76	4.780	35.86	4.404	0.90	1.139	Not Significant
Ownership	35.72	7.367	36.02	6.253	0.30	0.259	Not Significant
Reach	27.90	6.135	29.12	4.667	1.22	1.339	Not Significant
Endurance	33.02	6.132	34.19	5.082	1.17	1.225	Not Significant
Overall AQ	133.40	12.725	135.20	11.861	1.80	0.856	Not Significant
d.f. = 137					critical value at $\alpha_{.05} = 1.980$		

As shown in the table, there were no significant differences in the AQ profile of the educator respondents when they were grouped by civil status as denoted by the following computed t-values which were lesser than the critical value of 1.980 with 137 degrees of freedom at .05 significance level: control (t = 1.139), ownership (t = 0.259), reach (t = 1.339), endurance (t = 1.225), and overall AQ (t =

0.856). Based on this finding, the null hypothesis of no significant difference in the AQ profile of the respondents when they were grouped by civil status was accepted. Hence, it can be deduced that civil status was not a differentiating factor of the AQ profile of the educator respondents.

Table 18 reveals the t-test results in comparing the Adversity Quotient® Profile of the educator respondents when they are grouped by educational attainment.

Table 18

t-test Results in Comparing Adversity Quotient® Profile of Educator Respondents When They are Grouped by Educational Attainment

AQ Dimensions	Doctoral Degree/ With Doctoral units/ MA Degree		With M.A. units		Mean Diff.	Computed t-value	Verbal Interpretation
	Mean	SD	Mean	SD			
Control	37.07	3.822	36.04	4.725	1.03	1.060	Not Significant
Ownership	36.59	6.210	35.73	6.848	0.86	0.596	Not Significant
Reach	28.48	5.423	28.64	5.347	0.16	0.140	Not Significant
Endurance	33.48	5.132	33.75	5.670	0.27	0.225	Not Significant
Overall AQ	135.63	12.254	134.16	12.245	1.47	0.559	Not Significant
d.f. = 137				critical value at $\alpha_{.05} = 1.980$			

As seen in the tabular results, the AQ profile of the educator respondents did not vary significantly when they were grouped by educational attainment. This finding was supported by the following computed t-values which were lesser than the critical value of 1.980 with 137 degrees of freedom at .05 significance level: control ( $t = 1.060$ ), ownership ( $t = 0.596$ ), reach ( $t = 0.140$ ), endurance ( $t = 0.225$ ), and overall AQ ( $t = 0.559$ ).

Based on the foregoing finding, the null hypothesis of no significant difference in the AQ profile of the respondents when they were grouped by educational attainment was accepted. This implies that educational attainment was not a differentiating factor of the AQ profile of the educator respondents.

Table 19 shows the ANOVA results in comparing the Adversity Quotient® Profile of the educator respondents when they are grouped by length of service.

As reflected in the results, the AQ profile of the educator did not vary significantly when they were grouped by length of service. This finding was denoted by the following computed F values which were within the critical value of 2.67 with 3, 135 degrees of freedom:

control ( $F = 1.398$ ), ownership ( $F = 0.640$ ), reach ( $F = 2.202$ ),  
endurance ( $F = 1.720$ ), and overall AQ ( $F = 0.788$ ).

Table 19

ANOVA Results in Comparing Adversity Quotient® Profile of  
Educator Respondents When Grouped by Length of Service

INDICATORS	Age Bracket	Mean	Source of Variation	Sum of Squares	Computed F Value	Verbal Interpretation
Control	1-5 years	35.99	Between Groups	86.8346	1.398	Not Significant
	6-10 years	35.68	Within Groups	2794.3308		
	11-20 years	38.15	Total	2881.1655		
	21 years and above	35.90				
Ownership	1-5 years	35.99	Between Groups	87.2384	0.640	Not Significant
	6-10 years	35.68	Within Groups	6137.3515		
	11-20 years	37.45	Total	6224.5899		
	21 years and above	34.76				
Reach	1-5 years	29.10	Between Groups	183.7680	2.202	Not Significant
	6-10 years	30.47	Within Groups	3755.2536		
	11-20 years	27.00	Total	3939.0216		
	21 years and above	27.31				
Endurance	1-5 years	34.37	Between Groups	156.6645	1.720	Not Significant
	6-10 years	31.16	Within Groups	4098.6448		
	11-20 years	33.45	Total	4255.3094		
	21 years and above	33.90				
Overall AQ	1-5 years	135.44	Between Groups	354.4823	0.788	Not Significant
	6-10 years	133.00	Within Groups	20239.8631		
	11-20 years	136.05	Total	20594.3453		
	21 years and above	131.86				
d.f. = 3,135				critical value $\alpha .05 = 2.67$		

Based on the above finding, the null hypothesis of no significant difference in the AQ profile of the respondents when they were grouped by length of service was accepted. This finding implies that length of service was not a differentiating factor of the AQ profile of the educator respondents.

## **12. Comparison of Personality-Temperament Traits of Respondents When They are Grouped by Profile Variables**

Table 20 shows the results of the chi-square test in comparing the personality-temperament traits of the educator respondents when they are grouped by profile variables.

As gleaned in the table, the personality-temperament traits of the educator varied significantly when they were grouped by gender. This finding was supported by the computed  $\chi^2$  value of 48.674 which was greater than the critical value of 5.991 with 2 degrees of freedom. Likewise, when grouped according to civil status and educational attainment, the computed  $\chi^2$  values of 15.047 and

Table 20

Results of Chi-Square Test in Comparing Personality-Temperament Traits of educator Respondents When They are Grouped by Profile Variables

Profile Variables	Computed t-value	d.f.	Critical value at $\alpha$ .05	Verbal Interpretation
Gender	48.674	2	5.991	Significant
Age	45.240	4	9.488	Significant
Civil Status	15.047	2	5.991	Significant
Educational Attainment	50.752	2	5.991	Significant
Length of Service	15.960	6	12.592	Significant

50.752, respectively, denote a significant difference since these values were greater than the critical value of 5.991 with 2 degrees of freedom.

When grouped by age, the computed  $\chi^2$  value of 45.240 also denoted a significant difference in the personality-temperament traits of the educator since this was greater than the critical value of 9.488 with 4 degrees of freedom.

Likewise, when grouped by length of service, the personality-temperament traits of the educator varied significantly since the

computed  $\chi^2$  value of 15.960 was greater than the critical value of 12.592 with 6 degrees of freedom.

Based on the above findings, the null hypothesis of no significant difference in the personality-temperament traits of the educator respondents when they were grouped by profile variables was rejected. This indicates that gender, age, civil status, educational attainment and length of service were significant factors in differentiating the personality-temperament traits of the educator respondents.

With reference to the results of the chi-square computations, it can be deduced that male educator tend to have choleric and sanguine temperaments; while female educator are more likely to manifest choleric and melancholy temperaments.

In terms of age, it can be observed that younger educator tend to manifest choleric and sanguine temperaments; while the choleric and melancholy temperaments are more evident among older educators.

With respect to civil status, single educators are dominantly choleric; while some married educators are choleric and some also manifest sanguine and melancholy temperaments.

In terms of educational attainment, educator with higher educational attainment tended to be choleric and sanguine; while those with lower educational attainment tended to be choleric and melancholic.

Finally, in terms of length of service, educator with longer years of experience tended have a dominant a choleric temperament; while some educator who are new in the service are choleric and some are sanguine and melancholic.

## CHAPTER 5

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter gives a general overview of the study, and presents the significant findings, conclusions and recommendations offered.

The major purpose of this study is to examine the interrelationship among the Adversity Quotient®, personal characteristics and personality-temperament traits of educators in selected public and private educational institutions.

Specifically, answers to the following questions were sought:

1. What is the profile of the educator respondents in terms of the following:

- 1.1 gender;
- 1.2 age;
- 1.3 civil status;

1.4 educational attainment; and

1.5 length of service?

1. What is the Adversity Quotient of the educator respondents as measured by the following dimensions:

1.1 control;

1.2 ownership;

1.3 reach; and

1.4 endurance?

2. What is the personality temperament profile of the respondents?

3. How significant is the relationship between the Adversity Quotient and personality-temperament traits of the educator respondents?

4. How significant is the difference in the Adversity Quotient® of the educator respondents when they are grouped by their profile variables?

5. How significant is the difference in the personality-temperament traits of the educator respondents when they are grouped by their profile variables?

The study utilized the descriptive research method with the use of the questionnaire/checklist as the major instrument for gathering data. The personality-temperament profile scale adapted from the book of Tim LaHaye (1998) was used and the written format of the electronic form of Adversity Quotient® Profile instrument of Dr. Paul G. Stoltz (2009) in his latest AQ®P online version 8.1.

The respondents of the study were educators composed of college deans, school principals, school heads, academic heads and classroom teachers of selected public and private educational institutions in the Province of Aurora

The following statistical tools and techniques were used to ensure the valid and systematic presentation, analysis and interpretation of data: frequency and percentage, arithmetic mean, t-test for independent samples, one-way analysis of variance (ANOVA), Pearson Product Moment Correlation, and chi-square test.

## **Summary of Findings**

The significant findings of the study are discussed below:

### **1. Profile of School Administrator Respondents**

**1.1 Gender.** One hundred eleven (111) or 79.86% of the educators are female; and 28 or 20.14% are male.

**1.2 Age.** Thirty-nine (39) or 28.06% of the educators were 25 years and below; 28 or 20.14% were between 26 – 30 years old; 20 or 14.39% were between 31 – 35 years old; 8 or 5.76% belonged to the 36 – 40 years age group; 14 or 10.07% were between 41 – 45 years old; 13 or 9.35% were between 46 – 50 years old; 7 or 5.04% were between 51 – 55 years old; and 10 or 7.19% were 56 years and above. The mean age of the educator respondents was 34.69.

**1.3 Civil Status.** Eighty-one (81) or 58.27% of the educators were married; 55 or 39.57% were single; and an equal number of 1 or 0.72% were widowed, separated, and a single parent, respectively.

**1.4 Educational Attainment.** The highest educational attainment of 112 or 80.58% of the educator respondents was some units earned in their Master's degree program; 20 or 14.39% of the respondents were Master's degree holders; 4 or 2.88% had earned some doctoral units; and 3 or 2.16% were doctoral degree holders.

**1.5 Length of Service.** Seventy-one (71) or 51.08% of the educator respondents had 1 – 5 years of experience in the field of

education; 19 or 13.67% had 6 – 10 years length of service; 10 or 7.19% had 11 – 15 years length of service; and another 10 or 7.19% had 16 – 20 years length of service. School administrators with the longest years of service of 21 years and above numbered 29 or 20.86%. The mean length of service of the educator respondents was 9.65 years.

## **2. Adversity Quotient of Respondents**

**2.1 Control.** The computed mean score of the educator respondents was 36 and this was below the standard mean score of 41, which reflects a “below average” rating of the school administrators in the control dimension. This finding suggests that most of the educator respondents usually feel helpless in the face of adversity.

**2.2 Ownership.** The mean score of the respondents was 36 which was way below the standard mean of 45. This indicates a “low” rating of the educator respondents in the ownership dimension. This finding suggests that the educator respondents oftentimes disown the outcome of a problem, regardless of their cause. This results to

failing to act, giving up, pointing fingers, reduced performance and anger at other people and many more negative actions

**2.3 Reach.** The mean score of the educator respondents was 29 and this was below the standard mean of 32. This denotes a “below average” rating of the respondents in the reach dimension, which infer that most of the educator respondents often allow problems/adversities they face to affect other aspects of their lives often leading to panic and poor decision-making.

**2.4 Endurance.** The computed mean score of 34 was within the “average” rating which indicates that most educator respondents perceive that stressful times can be dealt with as it arise.

**Overall AQ.** The computed mean score of the overall AQ of the educator respondents equaled to 134 which is below the standard mean of 154. This indicates an overall “below average” AQ of the educator respondents.

### **3. Personality Temperament Profile of Respondents**

Most of the educator, 117 or 84.17%, had a choleric temperament; 11 or 7.91% had a sanguine temperament; and another 11 or 7.91% had a melancholy temperament.

#### **4. Relationship Between Adversity Quotient and Personality-Temperament Traits of Respondents**

**4.1 Sanguine Temperament.** No significant relationships were observed between the personality-temperament traits of the 11 educator respondents with sanguine temperament and their AQ profile in terms of the control ( $r = 0.065$ ,  $t = 0.196$ ), reach ( $r = 0.120$ ,  $t = 0.362$ ) and endurance ( $r = 0.180$ ,  $t = 0.546$ ).

On the other hand, low but not statistically significant correlations were noted between the personality temperament traits of educator with a sanguine temperament and their AQ profile in terms of ownership ( $r = 0.258$ ,  $t = 0.802$ ) and their overall AQ ( $r = 0.231$ ,  $t = 0.712$ ). This finding was based on the computed t-values which were within the critical value of 2.262 with 9 degrees of freedom at .05 significance level.

**4.2 Choleric Temperament.** The personality-temperament traits of the 117 educator respondents with choleric temperament did not significantly correlate with their AQ profile in terms of the following dimensions: control ( $r = 0.018$ ,  $t = 0.188$ ); ownership ( $r = -0.060$ ,  $t = 0.642$ ); reach ( $r = -0.076$ ,  $t = 0.813$ ), and endurance ( $r = -0.027$ ,  $t =$

0.292) and with their overall AQ ( $r = -0.073$ ,  $t = 0.790$ ). This finding was supported by the computed t-values which were lesser than the critical value of 1.980 with 115 degrees of freedom at .05 significance level.

**4.3 Melancholy Temperament.** The personality-temperament traits of the 11 educator respondents with melancholy temperament did not significantly correlate with their AQ profile in terms of the following dimensions: control ( $r = -0.187$ ,  $t = 0.571$ ) and overall AQ ( $r = -0.032$ ,  $t = 0.096$ ).

There were moderate but statistically not significant correlations between the personality-temperament traits of educator and their AQ profile in terms of ownership ( $r = -0.462$ ,  $t = 1.564$ ) and reach ( $r = 0.417$ ,  $t = 1.377$ ). A low but not statistically significant correlation was also observed between the personality-temperament traits of educator with melancholy temperament and their AQ profile in terms of endurance ( $r = 0.333$ ,  $t = 1.058$ ). These findings were supported by the computed t-values which were lesser than the critical value of 2.262 with 9 degrees of freedom at .05 significance level.

## **5. Comparison of Adversity Quotient® Profile of Respondents When They are Grouped by Profile Variables**

**5.1 When Grouped by Gender.** No significant difference was observed in the AQ profile of the educator respondents when they were grouped by gender in terms of the following dimensions: control ( $t = 0.617$ ), ownership ( $t = 0.245$ ), reach ( $t = 0.985$ ), endurance ( $t = 0.511$ ), and overall AQ ( $t = 1.030$ ). The computed t-values were lesser than the critical value of 1.980 with 137 degrees of freedom at .05 significance level

**5.2 When Grouped by Age.** The AQ profile of the educator did not vary significantly when they were grouped by age as denoted by the following computed F values which were within the critical value of 3.06 with 2, 136 degrees of freedom: control ( $F = 0.705$ ), ownership ( $F = 1.138$ ), reach ( $F = 1.085$ ), endurance ( $F = 0.710$ ), and overall AQ ( $F = 0.588$ ).

**5.3 Civil Status.** There were no significant differences in the AQ profile of the educator respondents when they were grouped by civil status as denoted by the following computed t-values which were lesser than the critical value of 1.980 with 137 degrees of freedom at

.05 significance level: control ( $t = 1.139$ ), ownership ( $t = 0.259$ ), reach ( $t = 1.339$ ), endurance ( $t = 1.225$ ), and overall AQ ( $t = 0.856$ ).

**5.4 Educational Attainment.** The AQ profile of the educator respondents did not vary significantly when they were grouped by educational attainment as supported by the following computed  $t$ -values which were lesser than the critical value of 1.980 with 137 degrees of freedom at .05 significance level: control ( $t = 1.060$ ), ownership ( $t = 0.596$ ), reach ( $t = 0.140$ ), endurance ( $t = 0.225$ ), and overall AQ ( $t = 0.559$ ).

**5.5 Length of Service.** The AQ profile of the educator did not vary significantly when they were grouped by length of service as denoted by the following computed  $F$  values which were within the critical value of 2.67 with 3, 135 degrees of freedom: control ( $F = 1.398$ ), ownership ( $F = 0.640$ ), reach ( $F = 2.202$ ), endurance ( $F = 1.720$ ), and overall AQ ( $F = 0.788$ ).

## **6. Comparison of Personality-Temperament Traits of Respondents When They are Grouped by Profile Variables**

The personality-temperament traits of the educator varied significantly when they were grouped by gender ( $\chi^2 = 48.674$ ), age ( $\chi^2$

= 45.240), civil status ( $\chi^2 = 15.047$ ), educational attainment ( $\chi^2 = 50.752$ ), and length of service ( $\chi^2 = 15.960$ ).

**6.1 When Grouped by Gender.** Male educators have choleric and sanguine temperaments; while female educators are more likely to manifest choleric and melancholy temperaments.

**6.2 When Grouped by Age.** Younger educators tend to manifest choleric and sanguine temperaments; while the choleric and melancholy temperaments are more evident among older educators.

**6.3 When Grouped by Civil Status.** Single educators are dominantly choleric; while some married educators are choleric and some also manifest sanguine and melancholy temperaments.

**6.3 When Grouped by Educational Attainment.** Educators with higher educational attainment are dominantly choleric and sanguine; while those with lower educational attainment tended to be choleric and melancholic.

**6.4 When Grouped by Length of Service.** Educators with longer years of experience tended to have a dominant choleric temperament; while some school administrators who are new in the service are choleric and some are sanguine and melancholic.

## Conclusions

The significant findings of the study provided bases for the following conclusions:

1. The educator respondents are mostly female, in their mid-thirties, and married. They have pursued post-graduate studies and most of them have around ten years of work experience in the field of education.

2. The educator respondents have below average AQ which indicates that they have less than the ideal capacity to resolve challenges difficulties, set backs and demands and to make every effort to overcome them so as not to affect their work.

3. Most of the educator respondents are fundamentally ambitious and leader-like, which are distinguishing traits of individuals with a choleric temperament.

4. The personality-temperament traits of educator who have a sanguine, choleric, and melancholy temperaments do not significantly influence their AQ® profile in the same way that their AQ® profile does not significantly affect their personality-temperament traits.

5. Gender, age, civil status, educational attainment, and length of service are not significant factors in differentiating the AQ® profile of the educator respondents.

6. Gender, age, civil status, educational attainment and length of service are significant factors in differentiating the personality-temperament traits of the educator respondents.

### **Recommendations**

In the light of the significant findings and conclusions of the study, the following recommendations are offered:

1. Higher management of the selected educational institutions in the Division of Aurora should review their selection process in recruiting and promoting educators and look into the possibility of integrating adversity quotient as one of the qualifications criteria in the hiring and promotion process.

2. Educators in the research locale should enhance their Adversity Quotient® through self-improvement activities such as reading of self-improvement/self-help books and attending self-

transformation seminars which specifically focus on how to handle adversities.

3. Educators should continuously engage in self-reflective practice to assess and be more aware of their personality-temperament profile in terms of their potential strengths and weaknesses, productive tendencies as well as their self-destructive tendencies. In the process, Educators can improve their leadership practices which can significantly impact their institution's performance.

4. Further studies should be conducted covering a larger sample size to take into account the effect of personality-temperament traits on AQ® and vice-versa in order to arrive at more accurate conclusions.

5. The subject educational institutions in the Province of Aurora, should incorporate the theory and practice of adversity quotient in their staff development and training programs to instill individual adversity awareness in order that educators, faculty and non-teaching personnel may be more capable to deal with adversity inherent in their jobs.

6. The results of this study may be shared with other higher education institutions for possible or follow-up studies.

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