

---

## Educational Leader's Adversity Quotient, Management Style and Job Performance: Implications to School Leadership

---

LOUISA ANNE TANSIONGCO <sup>1</sup> AND FLORANTE P. IBARRA <sup>2</sup>

### Abstract

The study examined the adversity quotient, school management style and job performance of public elementary school heads in Cabanatuan City, Philippines. Total population sampling was utilized among 38 public elementary school heads in the district. Anchored on Adversity Quotient Theory (Stoltz, 2000) and Situational Leadership Theory (Hersey & Blanchard, 2001), both processes measured how educational leader reacts and resolves within tough school related problems encountered. These lenses offered structure in looking at the four dimensions of adversity quotient in relation to leadership style. Survey questionnaire on Adversity Response Profile (ARP), Leadership Style, and Office/Individual Performance Commitment Response (OPCR) were utilized. With two-semester period of data consolidation, Pearson r product moment correlation assisted in the analysis of data. Results disclosed that, in adversity quotient and job performance, school heads having high degree of adversity quotient- control most likely to perform better in instructional leadership and quality standard for basic education program. Recommendations on the opportunity of assimilating adversity quotient and school management style in their current school head qualifications be considered to further improve organizational performance in the educational management system.

### Keywords

Adversity quotient, educational leadership, job performance; school management style, school supervisory system, school culture

---

<sup>1</sup> Department of Education and Related Studies, College of Education, Central Luzon State University, Philippines; e-mail: [latansiongco@clsu.edu.ph](mailto:latansiongco@clsu.edu.ph)

<sup>2</sup> Department of Education and Related Studies, College of Education, Central Luzon State University, Philippines, e-mail: [fpibarra@clsu.edu.ph](mailto:fpibarra@clsu.edu.ph)

## Introduction

Adversity Quotient significantly contributes to defining school heads' performance and their leadership style to educational system in particular. Adversity Quotient (AQ) measure's one's capacity to succeed from school challenges. It elucidates one's skills to positively address adverse circumstances within the scope of school supervisory management. Researchers have dedicated their skills to chronicle Intelligence Quotient (IQ) and Emotional Quotient (EQ), which are believed as elements of success to excellent performance. Stoltz (2000) has presented a new and interesting concept- Adversity Quotient (AQ) which tells how one withstands adversity and his ability to overcome it. For employees and managers, AQ seems to be the missing factor to success. Life seemed challenging, wherein people encounter various privations which could be tough to bridge. However, one could have an instinct capacity to alter negative situations to positivity. Stoltz (2000) defined Adversity Quotient as a process of one's triumph to successfully solve specific school concern. Likewise, it is an established science, theory and approach for becoming more resilient in managing school related apprehensions.

Today, schools face various issues that school heads need to cope up with. The most common of which includes school-teacher-student related problems. As Carnivel (2010) noted learning to deal with adversity is a significant element of effective management. Recurring internal and external problems in operation are often dealt by basic education institution and the process of solving such concern is highly reliant upon the school head's personal qualities expressed in style of management. As the leader of the institution, the school head has more responsibility and accountability in the organization. The foundation of organizational capacity lies in the ability of the faculty members, the administrator who serves as the leader to handle the smallest unit in an organization. Managing school is analogous to driving a car. It is often up-hill alongside what at times may seem overwhelming odds. Supervisory function is difficult requiring complete commitment. Educational leadership roles according to Brandon et al. (2016) play pivotal role in leading institutions to its path to erudition.

In this world today where administrators undertake multifaceted task, thus, it is expected for them to meet different people of the school. Their performance can be affected by many factors that surround them. It becomes more important then, to use an assessment to determine the level of performance of a school head. Their performance can be affected by many factors that surround them. The Department of Education in the Philippines offered provisions on the implementation of the Results-based Performance Management System as stated in DepEd order no. 2, s. 2015, stipulating the strategies, methods, tools and rewards for assessing the accomplishment vis-à-vis the commitment. Office Performance Commitment and Review Form (OPCRF) as measuring tool to monitor school targets and accomplishments. Providing the objectives made by each school head, it provides verifiable basis for rating and ranking the performance.

With previous studies on adversity quotient (Stoltz, 2000; Canivel 2010; Cabual 2011), the school management styles and the growing emergence of the different tools in the assessment of job performance regarding its importance in the workplace especially for

school heads, the researchers realized that it is critical to study these variables. Given this scenario, this study hoped to address the current issues relative to adversity quotient of school heads and how this might influence their capacity to perform as educational leaders. Stoltz (2000) claimed that AQ measure will strengthen the effectiveness of leaders. With this perspective, the researchers recognized this premise which is based on the evidence that once an individual or organization sees how one responds to adversity, improves these responses and thereby enhances the overall performance.

### Literature Review

Numerous studies chronicled how adversity quotient could be associated with the style of educational leaders and school management performance (Baroa, 2015; Canivel, 2010; Huijuan, 2009). In its simplest term, adversity is a challenge every school head encounters while adversity quotient (AQ) is a process of assessing one's capacity to face such challenge. It encompasses four dimensions such as control, origin and ownership, reach, and endurance. Studies have shown education leaders scored low in AQ (Cornista & Macasaet, 2013; Cura & Gozum, 2011). This indicated that educational administrators need to enhance their skills to face school related adversities. School heads' adversity response played a crucial role in school community relationship (Rajbhandari, 2017), teacher relationships (Ferrer, 2009; Maiquezet et al., 2015) as well as student academic performance (Williams, 2003). What significantly molded school management leaders could be attributed to treating risks as opportunities (Napire, 2013).

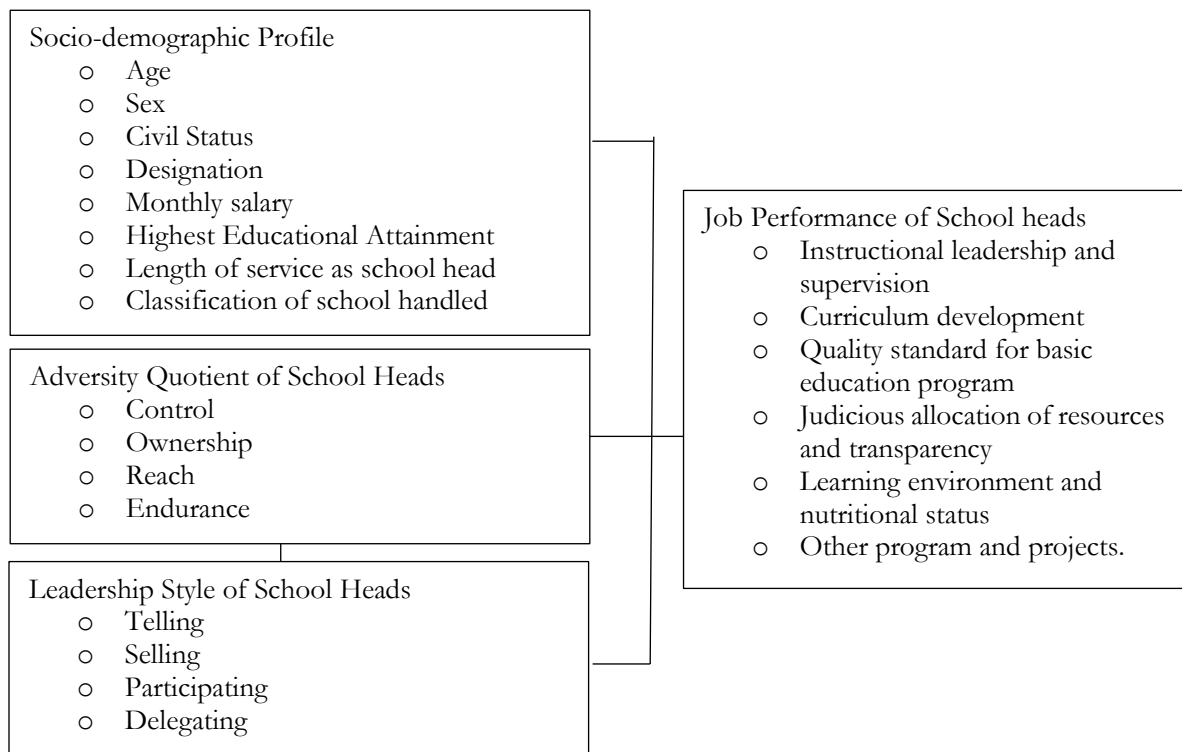
Institutional leadership had been chronicled in various contexts like activity that influence people (Kouzes & Posner, 1995; Terry, 1987), as pattern of interactions and leadership style characteristics (Brandon et al., 2016; Cura & Gozum, 2011). However, different perspectives argued that there would be no precise definition of school management to describing such complex phenomenon (Akman, 2016). Conversely, various point of views argued that its definition would be a huge thing. All meanings follow that management process is a leader role. Yet, literature on management style focused on the three theories of leadership: traits, behavior and situation (Amanchukwuet al., 2015; Ekundayo, 2010; Özgenel & Karsantik, 2020). Situational approach considers environmental elements which contribute to efficient school management style (Obasan & Yomi, 2011; Rajbhandari, 2017) which could be the output of motivated educational leaders (McColum, 2010).

Thus, adversity quotient offers positive influence on work related performance specifically on educational administrative matters (Billger, 2007; Cooley & Shen, 2003). Principal effectiveness would be an output which focuses and works on enhancing learning situation, teaching and continuous school progress (Suryadi & Santoso, 2017). Some of the most significant indicators of school heads include the capacities that are imperative to student's achievement (Hulaikah et al., 2020). The administrators' sensibility and accountability system would enrich teaching and learning performances and other school outcomes which would be associated with school head's performance. Situated on the Adversity Quotient Theory (Stoltz, 2000), Situational Leadership Theory or Situational Leadership Model (Hersey & Blanchard, 2001) and DEPED order no. 2, series of 2015. The principals' adversity quotient evaluates one's capacity to solve school problems. This AQ

starts with individual's actions within the realm of the theory. One's AQ would define which school management style could be applied based leadership actions. In the context of high adversity quotient, school heads may use suitable management style to address new practices for public elementary schools in Cabanatuan City. Eventually the characteristic an ideal leader will be apparent once succeeded against these adversities. Figure 1 shows the conceptual framework of the study.

In the conceptual framework, the independent variables included the socio-demographic profile of the school head respondents which comprised age, gender, civil status, designation, monthly salary, and highest educational attainment, length of service as school head and classification of school handled. Adversity quotient has four dimensions-control, ownership, reach and endurance; and leadership style which categorized as telling style, selling style, participating style and delegating style. Job performance of school heads served as dependent variable with six key result areas namely instructional leadership and supervision, curriculum development, quality standard for basic education program, judicious allocation of resources and transparency, learning environment and nutritional status and other programs and projects. As shown on the figure, it had established the interrelationships and correlations of the variables.

**Figure 1.** *Conceptual framework of the study showing the relationship of the independent and dependent variables*



## Methodology

### *Research design, sites, and participants*

Descriptive research design was used to guide the analysis of this research in finding the correlation of adversity quotient and school management style of elementary school heads in DepEd Cabanatuan City. Bernard (2006) defined descriptive research design as a methodical approach which consists of observable behavioral patterns without influencing it in any way to obtain a general overview of the subject. In this study, it was used to determine socio-demographic characteristics and their significant links to adversity quotient and style of management.

The study was conducted in public elementary schools in Cabanatuan City, Nueva Ecija, Philippines during the 2<sup>nd</sup> semester of academic year 2019-2020 at Cabanatuan City which administratively subdivided into 89 barangays. There were 38 elementary public schools in the division of Cabanatuan City wherein each has been managed by a school head. There were a total of 38 school heads who participated in the study. Total population sampling was used. Total population sampling as defined by Etikanet (2016) is a type of purposive sampling where the whole population of interest is studied. Total population sampling likewise is a method where the whole populaces that meet such conditions are included in the research being conducted. Total population sampling is more commonly used where the number of cases being investigated is relatively small. This sampling technique was utilized to gain complete representation of school heads whose adversity quotient as educational leader had being under investigation.

### *Instrumentation*

Four-part survey instrument was used to obtain data: Respondents' Personal Profile; the Adversity Quotient Profile; School Management style questionnaire and school heads' Office Performance Commitment Review Form (OPCRF). Part I dealt with socio-demographic profile of the school heads. In a checklist format, school heads marked the range of characteristic that best describe them. Part II covered the Adversity Response Profile (ARP). It was used to measure the adversity quotient of school heads. A self-rating questionnaire designed to measure individual's style of responding to adverse situation. Describing 30 scenarios, each statement represented a hypothetical event, which could be answered on a 5-point bipolar scale. There were four dimensions covered by AQ specifically control, origin-ownership, reach, and endurance. Although these dimensions may be intercorrelated, they measured significantly different aspects of AQ. The 30 events listed in the questionnaire were answered from range of 1 as the lowest to 5 as the highest and the description of choices. For control dimension, the scale is from no control as the lowest to complete control as highest. For ownership dimension, the scale is from not all responsible/other people or factor as the lowest to completely responsible/me as the highest. For reach dimension, the scale is from relates to all aspect of my life as the lowest to just relates to this situation as highest. For reach dimension, the scale is from never exist

again as the lowest to always exist as highest. Part III provided leadership style assessment consisting of fifty statements about school management behaviors. Developed by Canivel (2010), contents were revised and validated by research experts in the field. A scale of 1 to 4 was included to let respondents choose where they fit: the score of 4 was interpreted as almost true, 3 was interpreted as occasionally true, 2 was interpreted as seldom true, and 1 was interpreted as never true respectively. Part IV covered the OPCRf result of the school heads to measure their performance. Three experts in the field were consulted as regards to validity and the reliability was assessed through Cronbach alpha.

### ***Data collection and analysis***

A letter was sent to schools' division superintendent of Cabanatuan City for the permission to utilize the elementary school heads as respondents. After approval, the letter of request was sent to school heads granting the researcher to gather data. Further, permission was likewise sought to obtain the result of OPCRf of each school head. Orientation and explanation to school heads about the purpose of the study as well as instructions for each item in the instrument was made wherein it was personally distributed, administered and retrieved. Data analysis including mean, standard deviation, frequency and percentage was used. Specifically, the following interpretations were utilized to classify Adversity Quotient scores. Low AQ score falls from 10- 23 whereas average score falls from 24-37 and scores that fall from 38-50 are high AQ. The overall low AQ score falls from 95-134, moderate from 135-165, and high from 166-200 respectively. Pearson's product-moment correlation coefficient was utilized to find out the correlation between independent and dependent variables.

## **Results**

### ***School heads' socio-demographic profile***

Table 1 shows the socio-demographic profile of respondents. Fewer than half or 17 (44.7%) of school heads were 40-49 years old followed by 13 (34.2%) who were 50 years old and above. Seven school heads (18.4%) were 30-39 years old while one (2.6%) yet the youngest of all was under 29 years old and below. In terms of sex, most of the school heads (32 or 84.20%) were female while six (15.8%) were male. It had been very apparent that female school heads dominated management positions at DepEd Division of Cabanatuan City. On civil status, almost all of the school heads were married (37) with 97.4 percent while single comprised only 1 or 2.6 percent. Majority of the school heads had designations of Principal I-IV (23) with 60.5 percent while Head Teacher I-III comprised of 15 or 39.5 percent.

**Table 1.** *Socio-demographic characteristics of the school head respondents*

Socio-Demographic Profile	Frequency (N=38)	Percentage
Age		
29 years old and below	1	2.6
30-39 years old	7	18.4
40-49 years old	17	44.7
50 years above old	13	34.2
MEAN	45.10	
SD	1.79	
Sex		
Male	6	15.8
Female	32	84.2
Civil Status		
Single	1	2.6
Married	37	97.4
Designation		
Principal I-IV	23	60.5
Head Teacher I-III	15	39.5
Monthly Salary		
19,999 and below	0	0
20,000 - 24,999	0	0
25000- 29, 999	4	10.6
30,000 – 34,999	6	15.8
40,000 – 44,999	7	18.4
45,000 – 49,999	5	13.2
50,000 and above	16	42.1
Highest Educational Attainment		
Bachelor's Degree	3	7.9
Masteral Unit	5	13.2
MA or MS Equivalent	14	36.8
Doctoral Unit	13	34.2
Ph. D or Equivalent	3	7.9
Length Of Service as School Head		
4 years and below	14	36.8
5- 9years	4	10.5
10- 14years	7	18.4
15 years above	13	34.2
Classification of School Handled		
Large	8	21.1
Medium	13	34.2
Small	17	44.7

In monthly salary, fewer than half of school heads (16 or 42.1%) had a monthly income of Php50,000 and above followed by seven school heads (18.4%) with Php40, 000-44, 999 monthly salary income. Six (15.8%) had a monthly salary of Php30, 000-34,999 while

five (13.2%) had a monthly salary of 45, 000-49,999. Four (10.6%) had monthly salary of Php25, 000-29,999 and Php35, 000- 39, 999. Almost one-third of school head respondents (14 or 36.8%) obtained their master's degree. Only three (7.9%) had earned doctoral degree and the rest (13 or 34.2%) gained doctoral units. In length of service as school head, almost half belonged to the brackets of 1-4 years of service (14 or 36.8 %) while 13 (34.2%) belonged to 15 years and above. Seven (18.4%) had 10-14 years of service whereas four (10.5%) belonged to 5-9 years of service. On the classification of school dandled, almost half of them handled small school (17 or 44.7%). Thirteen (34.2%) managed medium schools and only eight (21.1%) run large schools respectively.

**Table 2.** *Relationship between socio-demographic profile and school heads' performance*

Socio-Demographic Characteristics	School Heads Job Performance					
	Instructional Leadership Supervision	Curriculum Development	Quality Standard for Basic Ed. Program	Judicious Allocation of Resources and Transparency	Learning Environment and Nutritional Status	Other Program and Projects
Age	-.278	.015	-.057	.121	-.067	-.067
Gender	-.036	-.090	-.035	-.081	-.045	-.045
Civil status	.051	.031	-.096	.204	-.142	-.142
Designation	.194	.040	.146	.036	.010	.010
Monthly Salary	-.065	-.106	-.242	.005	-.027	-.027
Highest Educ.	.662**	.221	-.152	-.004	-.065	.465*
Length of Service	-.216	-.217	-.164	.022	-.093	-.093
Classification of school	.025	-.057	.384*	-.052	.047	.047

\*. Correlation is significant at the 0.05 level (2-tailed)

\*\*. Correlation is significant at the 0.01 level (2-tailed)

This result was in lined with the research findings of Billger (2007), though teachers with doctorate degree holder could rarely be found in elementary schools, they were encouraged to take advanced professional development so that they would have more chances or opportunities for administrative positions rather than compelling themselves as plain classroom teachers.-Further, the school classification established a moderate positive correlation with quality standards for basic education program( $r=.384$ ,  $p<0.05$ ). This implies that the larger the school size, the school head performs better specifically in increasing by one percent the numeracy rate from previous enrolment, decreasing by two percent the school dropout rate from previous school year and increasing the literacy rate from the previous year. Therefore, the null hypothesis stating that there is no relationship between school heads' socio-demographic profile and performance was hereby rejected. There had been an established relationship between demographic profile and performance.



***Interrelationship of adversity quotient and school management style***

To determine whether the school heads' adversity quotient is interrelated to their school management style, correlation using Pearson r was computed. Results showed in table 3 that Selling established a highly positive relationship with Control ( $r=.845, p<0.01$ ).

**Table 3.** *Interrelationship between adversity quotient and school management style*

School Management Style	Adversity Quotient			
	Control	Ownership	Reach	Endurance
Telling	.325*	.186	.316*	-.242
Selling	.846**	.150	.096	-.074
Participating	.801**	.576*	.180	.074
Delegating	.493*	.760**	.185	.687*

\*. Correlation is significant at the 0.05 level (2-tailed)

\*\*. Correlation is significant at the 0.01 level (2-tailed)

Correspondingly, further analysis of the data revealed that Participating established a highly positive relationship with Control ( $r=.801, p<0.01$ ) and moderate relationship with Ownership ( $r=.576, p<0.05$ ). This implies that school heads that has participating leadership style has a high adversity quotient in control and ownership dimension. On the other hand, Delegating established a highly positive relationship with Adversity Ownership ( $r=.760, p<0.01$ ) and moderate relationships with Control ( $r=.493, p<0.05$ ) and Endurance ( $r=.687, p<0.05$ ) respectively. This implies that school heads having delegating style tends to have a high adversity quotient. Conversely, Telling Style established a moderate positive relationship with Control ( $r=.325, p<0.05$ ) and Reach ( $r=.316, p<0.05$ ).

***Relationship of adversity quotient and job performance of school heads***

To determine whether the school heads' adversity quotient is related to their performance, correlation using Pearson r was computed. Results showed in table 4, Control established a highly positive relationship with Quality Standard ( $r=.724, p<0.01$ ) and moderate relationship with Instructional Leadership ( $r=.398, p<0.05$ ). Correspondingly Ownership established a highly positive relationship with Other Programs and Projects ( $r=.868, p<0.01$ ). This result tends to propose that school heads that was high in adversity quotient-ownership has a performed better in other programs and project. On the other hand, further analysis of the data revealed Reach established moderate relationship with Judicious Allocations of Resources ( $r=.359, p<0.05$ ) and with Other Programs and Projects ( $r=.609, p<0.05$ ). Findings suggest that school heads having high in adversity quotient-reach performed better in judicious allocation of resources and transparency and other programs and projects. Further, Endurance established moderate relationship with Curriculum

Development ( $r=.664$ ,  $p<0.05$ ) and Judicious Allocations of Resources ( $r=.322$ ,  $p<0.05$ ) respectively.

**Table 4.** Relationship between adversity quotient and job performance of school heads

Parameters	Performance Key Result Area					
	Instructional Leadership Supervision	Curriculum Development	Quality Standard for Basic Ed. Program	Judicious Allocation of Resources and Transparency	Learning Environment and Nutritional Status	Other Program and Projects
Adversity Quotient						
Control	.398*	-.216	.724**	-.175	-.091	.162
Ownership	.216	.044	.085	.228	-.096	.868**
Reach	.275	.071	.021	.359*	.181	.609*
Endurance	-.183	.664*	-.105	-.322*	-.201	.012

\*. Correlation is significant at the 0.05 level (2-tailed)

\*\*.. Correlation is significant at the 0.01 level (2-tailed)

### *School management style and job performance*

Table 5 presents the connection between school heads' management style their job performance. Telling established moderate significant relationships with Instructional Leadership Supervision ( $r=.395$ ,  $p<0.05$ ) and quality standard for basic education program ( $r=.329$ ,  $p<0.05$ ). Correspondingly Selling established moderate significant relationships with other program and projects ( $r=.371$ ,  $p<0.05$ ). On the other hand, Participating established highly significant relationships with Learning Environment ( $r=.895$ ,  $p<0.01$ ) and moderate relationship with Instructional Leadership ( $r=.542$ ,  $p<0.05$ ). While Delegating established highly significant relationships with Quality Standard ( $r=.766$ ,  $p<0.01$ ) and Learning Environment ( $r=.747$ ,  $p<0.01$ ), moderate relationship had been found with Curriculum Development ( $r=.297$ ,  $p<0.05$ ) and other programs and Projects ( $r=.351$ ,  $p<0.05$ ) respectively.

**Table 5.** Relationship of school head's management style and performance

School Management Style	Performance Key Result Area					
	Instructional Leadership Supervision	Curriculum Development	Quality Standard for Basic Ed. Program	Judicious Allocation of Resources and Transparency	Learning Environment and Nutritional Status	Other Program and Projects
Telling	.395*	-.076	-.329*	-.073	-.051	-.159
Selling	.181	-.085	-.202	.006	-.196	.371*
Participating	.542*	-.164	.010	.245	.895**	.260
Delegating	-.202	.297*	.766**	.158	-.747**	.351*

## Discussion

Socio-demographic characteristics plays significant role in assessing school head's management style relative to adversity quotient. According to Robinson et al. (2017), the sex of school leaders makes a difference in career paths, personal life and characteristics of workplace. There is additional evidence that men and women are appointed or elected to lead different kinds of educational jurisdictions. Obviously, married school heads constantly dominated elementary schools. Özgenel and Karsantik (2020) noted that comparing married and unmarried principals, some significant differences and interesting similarities in the type and amount of support provided to married and unmarried principals have been chronicled thus far. Sari and Sa'adah (2019) posited that work placements and organizational commitment specifically recognizing various appointments played vital role on employee performance. Further, monthly income had been scattered in various groupings of salary range. On the issue of raising the principal wage to improve school outcomes, Lavy (2008) noted that priority to adjusting monthly higher wages should be given to school principals than their subordinates as they perform delicate administrative tasks. The findings on highest educational attainment most likely suggest that it was asymmetrical in various groupings. Since only three were doctoral degree holders, Billger (2007) noted that, though teachers with doctorate degree holder could rarely be found in elementary schools, teachers were encouraged to take advanced professional development so that they would have more chances or opportunities for administrative positions rather than compelling themselves as plain classroom teachers. In the length of service, Billger (2007) stressed out that years in service as school head constantly mold both novice and seasoned principals as they transformed their managerial skills with great sense of responsibility. Considering the type of school being managed by the school head, Rajbhandari (2016) noted that small schools manifest violence-free environment as success is attributed to small schools' human scale, more willing students, more committed teachers, coherent mission and relative autonomy compared to those supervising huge quantity of manpower.

Adversity quotients and job performance were found have substantial inter connections. School heads owning high in selling style most likely to have high adversity quotient in control dimension. Confirmed with Canivel (2011), selling style manifests the opposite of telling which is believed to be characterized by coaching. Communications would be imperative where "together working things out". Selling style assists school heads in achieving their goals. School heads characterizing openness are more likely to perceive that he has strong degree on control over adverse event and view success as his doing and adversity as originating primarily from some external source. The result rejected Ferrer (2009) stating of no significant relationship between participative style and over-all Adversity Quotient level. Moreover, principals possessing low task and connection focus most likely to perceived that he has strong degree on control over adverse event, he view success as his doing and adversity as originating primarily from some and external source and he may view success as enduring if not permanent. Delegating style can be described also as *laisses faire* leadership. The result rejected the findings of Enriquez and Estacio (2009) about the link between adversity quotients and transformational-transactional was also not significantly related. However, school heads with dominant telling style tends to possess

| E-ISSN: 2580-5711 | <https://online-journal.unja.ac.id/index.php/irje/index> | 396

high adversity quotient in these factors. This confirmed Canivel (2011) that telling style equated with solid management. This school management style provides clear direction in attaining school goals and objectives (Hersey & Blanchard, 2001). Baroa (2015) stated that adversity quotient and school management style significantly related to one another. Further, the present findings contrast Napire (2013) claiming that no established links between adversity quotient and school management style.

In school management performance, school heads that are high in adversity quotient- control tends to perform better in instructional leadership and quality standard for basic education program. School heads that have strong degree of control over adverse event performed well in instructional leadership and supervision and quality standard for basic education program. More so, school heads who reflect an ability to avoid unnecessary self-blame while putting one's own responsibility most likely to perform well in other projects and programs. This context suggests that school heads hold themselves accountable for the outcome of their performance in other program and projects regardless of the reason it's going poorly. School heads that keep adversity in its place and make life's difficulties, frustrations and challenges more manageable performed well in judicious allocation of resources and transparency and other programs and projects. The result rejected the findings of Akman (2016) stating that ownership negatively influenced school heads performance in terms of mathematics, English, science and overall national achievement test.

Furthermore, school heads that were high in adversity quotient-- endurance tend to perform better in curriculum development. Educational leaders having a perception that adversity and its causes will eventually pass and view success as enduring, performed better in curriculum development. Amparo (2015) stated that there was significant positive correlation between endurance and commitment to school. The results of this study rejected the findings of Cabual (2011) stating that performance levels of deans were not significantly related to their Adversity Quotient. However, the result concurred with the findings of Canivel (2011) stating that principals' performance resulted having a positive relationship with adversity quotient and Cornista and Macasaet (2013) stating that there is fairly strong correlation of adversity quotient and performance. School heads possessing selling management style most likely to perform better in other program and projects. Selling is in contrast to telling. This implies that school heads that are coaching, has problem-solving styles or win-win leadership style is more likely perform well in other programs and projects. Most of the programs and projects were done not only with the school head but also with the support of the teachers, if the school heads spent their time helping teachers to gain knowledge and skills, the goals and objectives in other program and projects were achieved with excellence. Similarly, school heads having participating style tend to perform better in learning environment and nutritional status and instructional leadership and supervision. Lastly, school heads manifesting delegating style most likely to perform better in quality standards for basic education program and learning environment. School heads offering little or no guidance to group members and leave decision-making up to group member tend to perform better in most of administrative functions stipulated in OPCRF. Concurred with McGrath and MacMillan (2000), effective leadership style contributes towards better performance.

## Conclusions

School heads' adversity quotient were found to be moderate and all of them have average AQ in all variables being measured. School head tends to have typical capability in addressing challenges. These have reflected in their school management style. Participating style significantly dominated the educational management system among school heads. Respondents took full advantage of their school management performance considering that participating style is believed to be the best method in leading subordinates. School heads who have mostly practiced participating leadership style most likely to characterize as being supportive, always motivated, ready to listen, consistently giving commendations and praise, and constantly making their teachers feel good and inspired in their working conditions. With outstanding evaluation of school heads' performance in six key-areas, an individual possesses an extraordinary level of capability to achieve ideal educational management system in terms of quality and time, technical skills and knowledge, ingenuity, creativity and initiative. These have manifested in one's qualification to lead an institution. As an empirical evidence, it indicated that school heads with doctoral degree tends to perform better than those with lesser qualifications specifically in the areas of instructional leadership, school projects, and related academic and community programs.

Adversity quotient and school management style played vital role in school administration. School heads possessing high level of telling style tends to have a high adversity quotient in control and reach dimensions. While school heads who own high degree of selling style most likely to have a high adversity quotient in control dimension, the school heads who characterize participating style tends to have a high adversity quotient in control and ownership dimension. More so, school heads who have delegating style most likely to have a high adversity quotient in control, ownership and endurance dimension. Thus, adversity quotient and school management style offer substantial connectedness. There seem to have an underlying principle that might overshadow the process of decision-making which could further enhance the formulation and implementation of school policies.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## Acknowledgments

The authors would like to extend their deepest gratitude and appreciation to the Indonesian Research Journal in Education (IRJE) for serving as platform to researchers and providing an avenue as well as opportunities to publish their scholarly works.

## References

Akman, T. (2016). Younger school principals mean less experience but more idealism and social and digital skills. *The Inquirer*, 2(1), 2-7.

- Amanchukwu, R. N., Stanley, G. J., & Ololube, N. P. (2015). A review of leadership theories, principles and styles and their relevance to educational management. *Management Journal*, 5(1), 6-14.
- Amparo, M.M. (2015). The level of adversity quotient and social skills of student leaders at De La Salle Lipa. *Education Review*, 2(1), 12-23.
- Baroa, E. (2015). *Adversity Quotient and Leadership Skills of School Administrators: Basis for Enhancement*. Unpublished master's thesis. University of Santo Tomas, Philippines.
- Bass, B.M. (2008). *The bass handbook of leadership. Theory, research and managerial applications*. 4th edn., The Free Press, New York.
- Bernard, R. H. (2006). *Research method in anthropology*. New York, NY: Altamira Press.
- Billger, S. (2007). Principals as agents? Investigating accountability in the compensation and performance of school principals. *Industrial Labor Relation Review*, 61(1), 90-107.
- Brandon, J., Saar, C., Friesen, S., Brown, B., & Yee, D. (2016). Pedagogical leadership team: Magnifying and spreading impact. In M. A. Takeuchi, A. P. Preciado Babb, & J. Lock (Eds.). *Proceedings of the IDEAS: Designing for Innovation*, pp. 152-161. Calgary, Canada: University of Calgary.
- Cabual, R.A. (2011). *Adversity quotient and the performance level of deans of colleges of education in selected private schools in region III: Their implications to educational leadership*. Unpublished master's thesis. College of Immaculate Conception, Cabanatuan City, Philippines.
- Cooley, V., & Shen, J. (2003). School accountability and professional job responsibilities: A perspective from secondary principals. *NASSP Bulletin*, 87(1), 10-25.
- Cornista, G.L., & Macasaet C.A. (2013). *Adversity quotient and achievement motivation of selected third year and fourth year psychology students of De La Salle Lipa*. Unpublished master's thesis. De La Salle University, Lipa Batangas.
- Cura, J. & Gozum, J. (2011). *A correlational study in the adversity quotient and the academic achievement of sophomore students*. Unpublished master's thesis. Pamantasan ng Lungsod ng Maynila.
- Ekundayo, H. T. (2010). Principals' leadership behavior as a determinant of effectiveness of secondary schools in Nigeria. *European Journal of educational Studies*, 2(1), 25-30.
- Enriquez, J. & Estacio, S.D. (2009). The effects of mentoring program on adversity quotient of selected freshmen college students of faith. *Teacher Education Journal*, 2(1), 68-72.
- Etikan, I. (2016). comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 16-27.
- Ferrer, M. (2009). *Relationship of personal characteristics, leadership styles, and job satisfaction to adversity quotient of academic heads of selected state colleges and universities in the national capital region*. Unpublished doctoral dissertation. Polytechnic University of the Philippines.
- Hersey P., & Blanchard, K. (2001). *Situational leadership*. New York, NY: Altamira Press.
- Hulaikah, M., Degeng, I. N., Sulton, & Murwani, F. (2020). The effect of experiential learning and adversity quotient on problem solving ability. *International Journal of Instruction*, 13(1), 869-884.
- Huijuan, Z. (2009). *The adversity quotient and academic performance among college students at St. Joseph's College, Quezon City*. Unpublished master's thesis. St. Joseph's College, Quezon City, Philippines.

- Kouzes, J. M., & Posner, B. Z. (2007). *The leadership challenge (4<sup>th</sup> Ed.)*. San Francisco, CA: Jossey-Bass.
- Lavy, V. (2008). Does raising the principal's wage improve the school's outcomes? Quasi-experimental evidence from an unusual policy experiment. *The Scandinavian Journal of Economics*, 110(4), 142-153.
- Maiquez, R., Preolco, A., Sausa, L., & Talatagod, K. (2015). predictive ability of emotional intelligence and adversity quotient on academic performance of USC college students. *Education Digest*, 5(1), 35-44.
- McColumb, B. R. (2010). *Principals' leadership styles and their impact on school climate: Assistant principals' perceptions*. Unpublished master's thesis. University of Georgia.
- Mostovicz, E. I., Kakabadse, N. K., & Kakabadse, A. P. (2009). A dynamic theory of leadership development. *Leadership & Organization Development Journal*, 30(6), 563-576.
- Napire J. (2013). Adversity quotient and leadership style in relation to the demographic profile of the elementary school principals in the second congressional district of camarines sur. *Education Review*, 5(6), 68-70.
- Northouse, P. G. (2010). *Leadership theory and practice*. (5th.ed.). Sage publication, Inc. Thousand Oaks: California.
- Özgenel, M. & Karsantik, I. (2020). Effects of school principals' leadership styles on leadership practices. *Malaysian Online Journal of Educational Sciences*, 8(2), 1-13.
- Obasan, K. A., & Yomi, A. O. (2011). Manpower planning and education in Nigeria. *European Journal of Humanities and Social Sciences*, 8(1), 314-321.
- Rajbhandari, M. M. S. (2016). Leadership of special students in strengthening their ability by understanding their weaknesses. *European Journal of Educational and Social Sciences*, 1(1), 11 - 23.
- Rajbhandari, M.M. (2017). Leadership elasticity enhancing style-flex for leadership equilibrium. *International Journal of Psycho-Educational Sciences*, 6(2), 76-88.
- Robinson, K., Shakeshaft, C., Grogan, M., & Newcomb, W. (2017). Necessary but not sufficient: The continuing inequality between men and women in educational leadership. *Front Education*, 4(1), 2-12.
- Sari, P., & Sa'adah, P. (2019). Work Placement, Organizational Commitment and Employee Performance. *Review of Behavioral Aspect in Organizations and Society*, 1(2), 129-140.
- Stoltz, P. G., & Weihenmayer, E. (2006). *The Adversity Advantage: Turning Everyday Struggles into Everyday Greatness*. New York: Simon & Schuster.
- Stoltz, P.G. (2000). *Adversity quotient at work; make everyday challenges the key to your success. Putting the principles of AQ into action*. New York: Morrow.
- Suryadi, B., & Santoso, T. I. (2017). Self-Efficacy, Adversity quotient, and students' academic achievement. *International Education Studies*, 10(10), 12-19.
- Terry, G.R., & Franklin, S.G. (1987). *Principles of management*. New Delhi: All India Traveller Bookseller.
- Williams, M. (2003). *The relationship between principal response to adversity and student achievement*. Unpublished master's thesis. Cardinal Stritch University, Wisconsin.

### Biographical notes

**LOUISA ANNE TANSIONGCO** is a graduate alumnae of Central Luzon State University, College of Education, Department of Education and Related Studies (Graduate Program). She is currently connected with the Department of Education in the Philippines as elementary teacher at Cabanatuan City Central School, Neuva Ecija, email: [latansiongco@clsu.edu.ph](mailto:latansiongco@clsu.edu.ph)

**FLORANTE P. IBARRA** is an accredited full-fledged professor at Central Luzon State University Graduate School of Education in the Philippines. He teaches courses such as advance methods of educational research, philosophy of education, and philosophy in educational management ethics. A multi-awarded music educator and music researcher, his interests focus on classroom instructions, school management system, teaching and learning musical traditions and cultural anthropology. He published various research articles in reputable international journals under Social Science Citation Indexed, Emerging Sources Citation Indexed and Scopus, e-mail: [fpibarra@clsu.edu.ph](mailto:fpibarra@clsu.edu.ph)