



## RESEARCH ARTICLE

### ADVERSITY QUOTIENT OF BACHELOR OF SCIENCE IN COMPUTER SCIENCE STUDENTS AT EASTERN SAMAR STATE UNIVERSITY SALCEDO CAMPUS

\*Marco C. Berongoy, Dr. Marina S. Apilado, Arvin Anthony S. Araneta and Judith Ty Pelobello

Eastern Samar State University – Salcedo Campus

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#### ABSTRACT

This descriptive research was conducted to determine the adversity quotient of the students in Bachelor of Science in Computer Science (BSCS) at Eastern Samar State University Salcedo Campus. Respondents of the study were the four hundred nineteen (419) out of five hundred ninety four (594) or 70.53 percent BSCS students enrolled during the first semester of school year 2015 - 2016. A modified standardized instrument, Adversity Quotient questionnaire was used in this study. Results showed that regardless of the grouping, students had “Below Average” adversity quotient. Based on the findings of this study the following therefore are recommended:

The administration and faculty of BSCS should be cautious in dealing with the students. Their actions might lead to frustrations in some of these students. There is a need for well-designed activities in school. Curricular and co-curricular activities should be designed in a manner that will improve the AQ of the students. Further study should be made involving other factors to affirm the results of this study. Studies should also be done integrating activities for the development of the students’ AQ.

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## INTRODUCTION

College life is another milestone for an individual. Students are confronted with situations different from their high school life. Situations in school combine both favorable and adverse. To whatever extent each situation is being encountered by a student contributes to his or her personality. Like any other students, students in Bachelor of Science in Computer Science (BSCS) at Eastern Samar State University (ESSU) Salcedo Campus are confronted with varying situations. Stoltz (2001) provided the theory on Adversity Quotient (AQ) of an individual on how to resolve such challenge and strive to overcome it so as not to affect deeply what he/she will accomplish in his/her work and towards life. He defines adversity quotient as the measure of one’s resilience and ability to persevere in the face of constant change, stress, and difficulty – or AQ is simply a measure of how you respond to adversities that now comprise a typical day. Adversity Quotient (AQ) is the science of human resilience. According to Stoltz, people who successfully apply this perform optimally in facing 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 (<http://peaklearning.com/>).

Adversity can be an opportunity to strengthen the thoughts of a person and establish one’s achievements. Surpassing any adverse events in life will lead a person to better way of understanding a problem. Adversity can strengthen a person’s decision-making over indefinite events in every situation. This research attempted to study the ability of the students to go beyond turmoil and triumph against adversities in life. This also studied the adversity quotient of students when taken as an entire group and grouped according to its demographic profile.

**Conceptual Framework of the Study:** Figure 1 depicts the paradigm of the study. It consists of the independent variables, which are the student related factors such as age, sex, marital status and year level and the dependent variable, which is the adversity quotient in the four components namely, Control, Ownership, Reach, and Endurance.

**Statement of the Problem:** This study aimed to determine the adversity quotient of BSCS students at ESSU Salcedo Campus during the first semester of school year 2015 - 2016. Specifically, this study aimed to answer the following questions:

- What is the adversity quotient of students when:
  - a. taken as an entire group
  - b. grouped according to age
  - c. grouped according to sex

- d. grouped according to marital status
  - e. grouped according to year level?
- What is the students' adversity quotient in each component namely, Control, Ownership, Reach, and Endurance when:
    - a. taken as an entire group
    - b. grouped according to age
    - c. grouped according to sex
    - d. grouped according to marital status
    - e. grouped according to year level?

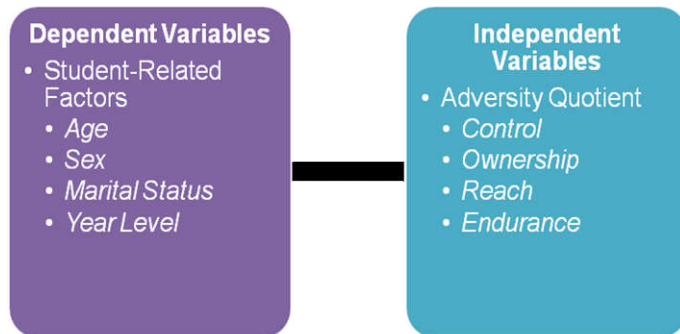


Figure 1. Conceptual Framework of the Study Showing the Relationship among Variables

## MATERIALS AND METHODS

This study made use of a descriptive design since it describes the characteristics of the respondents in terms of their personal profile and their adversity quotient. The Bachelor of Science in Computer Science students enrolled during the first semester of school year 2015-2016 served as the participants of this study. However, only four hundred nineteen (419) out of five hundred ninety four (594) or 70.53 percent of the population responded the time when the questionnaire was administered. This study used a survey questionnaire as the main instrument in collecting data from the student-respondent. Then, data were gathered, tallied, computed, interpreted, and analyzed using descriptive statistics.

## RESULTS AND DISCUSSION

### Demographic Profile of the Respondents

The succeeding tables present the data on the demographic profile of the four hundred nineteen (419) BSCS students. This includes the age, sex, marital status and year level.

#### Age

The table 1 shows that most of BSCS students at ESSU Salcedo have ages ranging from 15-19 which constituted 283 or 67.5%. about 115 or 27.4% of the respondents have ages ranging from 20-24, 16 or 3.8% were 25-29 years old and 5 or 1.2% were 30 years old and above. This means that most BSCS students at ESSU Salcedo Campus were in their young age.

Table 1. Age of BSCS Students in ESSU Salcedo Campus during the First Semester, S.Y. 2015 – 2016

Age	Frequency	Percentage
30 years old and above	5	1.2
25 – 29 years old	16	3.8
20 – 24 years old	115	27.4
15 – 19 years old	283	67.5
Total	419	100

**Sex:** The table shows that 249 or 59.4% of the student-respondents were females and 170 or 40.6% of the respondent were males. The results means that most BSCS students at ESSU Salcedo were female students.

Table 2. Sex of BSCS Students in ESSU Salcedo Campus during the First Semester, S.Y. 2015 – 2016

Sex	Frequency	Percentage
Female	249	59.4
Male	170	40.6
Total	419	100

**Marital Status:** Table 3 presents the marital status of the respondents of the BSCS students at ESSU Salcedo campus. The table discloses that 404 or 96.4% of the students-respondents were single. There were 11 or 2.6% who were married and 3 or 0.7% were separated and 1 or 0.2% were widow/widower. This means that most of the BSCS students at ESSU Salcedo Campus were single.

Table 3. Marital Status of BSCS Students in ESSU Salcedo Campus during the First Semester, S.Y. 2015 – 2016

Sex	Frequency	Percentage
Widow/Widower	1	0.2
Separated	3	0.7
Married	11	2.6
Single	404	96.4
Total	419	100

**Year Level:** Table 4 presents the year level of the respondents. The table shows that majority of the respondents were first year students comprising 142 or 33.9% of the total population. 110 or 26.3% were second year, 99 or 23.6% were third year and 68 or 16.2% were 4<sup>th</sup> year students. This means that most of the student respondents were first year students.

Table 4. Year Level of BSCS Students in ESSU Salcedo Campus during the First Semester, S.Y. 2015 – 2016

Sex	Frequency	Percentage
Fourth Year	68	16.2
Third Year	99	23.6
Second Year	110	26.3
First Year	142	33.9
Total	419	100

### Adversity Quotient

Table 5 shows that the students as an entire group, had “Below Average” AQ ( $M=120.95$ ,  $SD=22.409$ ). When students were grouped according to age, all category had “Below Average”, 30 years old and above ( $M=131.20$ ,  $SD=17.6974$ ), 25-29 years old ( $M=134.75$ ,  $SD=19.94$ ), 20-24 years old ( $M=121.90$ ,  $SD=21.7318$ ), 15-19 years old ( $M=119.90$ ,  $SD=22.6735$ ). When students were grouped according to gender both female ( $M=122.40$ ,  $SD=21.8757$ ) and male ( $M=118.83$ ,  $SD=23.0714$ ) also had “Below Average”.

When grouped according to marital status, all had “Below Average”, widow/widower ( $M=106.00$ ,  $SD=0.0000$ ), separated ( $M=113.33$ ,  $SD=2.3094$ ), married ( $M=131.45$ ,  $SD=18.2228$ ), single ( $M=120.76$ ,  $SD=22.5521$ ). When grouped according to year level, all had “Below Average” fourth year ( $M=122.58$ ,  $SD=2.3225$ ), third year ( $M=133.25$ ,  $SD=2.0465$ ), second year ( $M=118.03$ ,  $SD=1.9337$ ), and first year ( $M=120.95$ ,  $SD=1.9541$ ).

**Table 5. Adversity Quotient of BSCS Students in ESSU Salcedo Campus during the First Semester, S.Y. 2015 – 2016**

Category	N	Mean	Description	SD
Entire Group	419	120.95	Below Average	22.409
Age				
30 years old and above	5	131.20	Below Average	17.6974
25 – 29 years old	16	134.75	Below Average	19.9449
20 – 24 years old	115	121.90	Below Average	21.7318
15 – 19 years old	283	119.90	Below Average	22.6735
Sex				
Female	249	122.40	Below Average	21.8757
Male	170	118.83	Below Average	23.0714
Marital Status				
Widow/Widower	1	106.00	Below Average	0.0000
Separated	3	113.33	Below Average	2.3094
Married	11	131.45	Below Average	18.2228
Single	404	120.76	Below Average	22.5521
Year Level				
Fourth Year	68	122.58	Below Average	2.3225
Third Year	99	133.25	Below Average	2.0465
Second Year	110	118.03	Below Average	1.9337
Frist Year	142	120.95	Below Average	1.9541

### Dimensions of AQ

Adversity Quotient (AQ) has four dimensions namely Control, Ownership, Reach, and Endurance. Table 6 reveals that the AQ's Control dimension of students was "Below Average" AQ (M=15.17, SD=3.3673). When students were grouped according to age, the AQ's Control dimension for age were "Below Average" AQ 30 years old and above (M=16.00, SD=3.6742), 25-29 years old (M=16.87, SD=2.6801), 20-24 years old (M=15.15, SD=3.0596), 15-19 years old (M=14.91, SD=3.4962). When students were grouped according to gender, the AQ's Control dimension for both female (M=15.32, SD=3.4863) and male (M=14.70, SD=3.1597) also had "Below Average". When grouped according to marital status, separated (M=13.66, SD=2.0816), married (M=16.18, SD=2.8919), single (M=15.06, SD=3.3793) had "Below Average", while widow/widower (M=10.00, SD=0.0000) had "Average". The students' AQ's Control dimension in fourth year (M=15.55, SD=2.9135), third year (M=16.62, SD=3.0824), second year (M=14.36, SD=3.0702), and first year (M=14.30, SD=3.5907).

**Table 6. AQ's Control Dimensions of BSCS Students in ESSU Salcedo Campus during the First Semester, S.Y. 2015 – 2016**

Category	N	Mean	Description	SD
Entire Group	419	15.07	Below Average	3.3673
Age				
30 years old and above	5	16.00	Below Average	3.6742
25 – 29 years old	16	16.87	Below Average	2.6801
20 – 24 years old	115	15.15	Below Average	3.0596
15 – 19 years old	283	14.91	Below Average	3.4962
Sex				
Female	249	15.32	Below Average	3.4863
Male	170	14.70	Below Average	3.1597
Marital Status				
Widow/Widower	1	10.00	Low	0.0000
Separated	3	13.66	Below Average	2.0816
Married	11	16.18	Below Average	2.8919
Single	404	15.06	Below Average	3.3793
Year Level				
Fourth Year	68	15.55	Below Average	2.9135
Third Year	99	16.62	Below Average	3.0824
Second Year	110	14.36	Below Average	3.0702
Frist Year	142	14.30	Below Average	3.5907

For the AQ's Ownership dimension, table 7 reveals that the students were "Below Average" AQ (M=15.36, SD=3.2881) when taken as an entire group. When students were grouped according to age, the AQ's Control dimension of 30 years old

and above (M=16.00, SD=3.6742) was "Below Average", 25-29 years old (M=17.06, SD=2.7439) was "Average", while 20-24 years old (M=15.32, SD=3.1554) and 15-19 years old (M=15.26, SD=3.3618) was "Below Average". When students were grouped according to gender, the AQ's Control dimension for both female (M=15.64, SD=3.6029) and male (M=14.96, SD=3.0086) also had "Below Average" AQ. When grouped according to marital status, all had "Below Average" AQ, widow/widower (M=15.00, SD=0.0000), separated (M=15.33, SD=0.5773), married (M=15.81, SD=3.0925), single (M=15.35, SD=3.3120). The students' AQ's Ownership dimension in fourth year (M=15.50, SD=2.5655) was "Below Average", third year (M=17.07, SD=2.9116) were said to be "Average", while second year (M=15.08, SD=3.0049), and first year (M=14.33, SD=3.5826) were "Below Average".

**Table 7. AQ's Ownership Dimensions of BSCS Students in ESSU Salcedo Campus during the First Semester, S.Y. 2015 – 2016**

Category	N	Mean	Description	SD
Entire Group	419	15.36	Below Average	3.2881
Age				
30 years old and above	5	16.80	Below Average	2.4899
25 – 29 years old	16	17.06	Average	2.7439
20 – 24 years old	115	15.32	Below Average	3.1554
15 – 19 years old	283	15.26	Below Average	3.3618
Sex				
Female	249	15.64	Below Average	3.6029
Male	170	14.96	Below Average	3.0086
Marital Status				
Widow/Widower	1	15.00	Below Average	0.0000
Separated	3	15.33	Below Average	0.5773
Married	11	15.81	Below Average	3.0925
Single	404	15.35	Below Average	3.3120
Year Level				
Fourth Year	68	15.50	Below Average	2.5655
Third Year	99	17.07	Average	2.9116
Second Year	110	15.08	Below Average	3.0049
First Year	142	14.33	Below Average	3.5826

Table 5 shows the AQ's Reach Dimension and it shows that the students as an entire group, had "Below Average" (M=15.00, SD=3.3673). When students were grouped according to age, all category had "Below Average", 30 years old and above (M=15.20, SD=1.4832), 25-29 years old (M=16.37, SD=16.37), 20-24 years old (M=15.20, SD=3.0707), 15-19 years old (M=14.84, SD=3.1426). When students were grouped according to gender both female (M=15.09, SD=3.0086) and male (M=14.88, SD=3.2322) also had "Below Average". When grouped according to marital status, all had "Below Average", widow/widower (M=15.09.00, SD=0.0000), separated (M=14.00, SD=1.0000), married (M=16.27, SD=2.8667), single (M=14.98, SD=3.1114). When grouped according to year level, all had "Below Average" fourth year (M=15.50, SD=2.5655), third year (M=17.07, SD=2.9116), second year (M=15.08, SD=3.0049), and first year (M=14.33, SD=3.5826). For the AQ's Endurance dimension, table 7 reveals that the students were "Below Average" AQ (M=14.98, SD=3.3638) when taken as an entire group. When students were grouped according to age, the AQ's Control dimension of 30 years old and above (M=17.60, SD=2.8809) was "Average", while 25-29 years old (M=16.50, SD=3.9157), 20-24 years old (M=14.88, SD=3.3944) and 15-19 years old (M=19.89, SD=3.3042) all obtained "Below Average". When students were grouped according to gender, the AQ's Control dimension for both female (M=15.07, SD=3.4034) and male (M=14.85, SD=3.3109) also had "Below Average" AQ. When grouped according to marital status, all had "Below Average"

AQ, widow/widower (M=13.00, SD=0.0000), separated (M=13.66, SD=2.0816), married (M=16.63, SD=2.5405), single (M=14.95, SD=3.3848). The students' AQ's Ownership dimension in fourth year (M=15.50, SD=2.5655) was "Below Average", third year (M=17.07, SD=2.9116) were said to be "Average", while second year (M=15.08, SD=3.0049), and first year (M=15.08, SD=3.5826) were "Below Average".

**Table 8. AQ's Reach Dimensions of BSCS Students in ESSU Salcedo Campus during the First Semester, S.Y. 2015 – 2016**

Category	N	Mean	Description	SD
Entire Group	419	15.00	Below Average	3.3673
Age				
30 years old and above	5	15.20	Below Average	1.4832
25 – 29 years old	16	16.37	Below Average	2.6299
20 – 24 years old	115	15.20	Below Average	3.0707
15 – 19 years old	283	14.84	Below Average	3.1426
Sex				
Female	249	15.09	Below Average	3.0086
Male	170	14.88	Below Average	3.2322
Marital Status				
Widow/Widower	1	15.00	Below Average	0.0000
Separated	3	14.00	Below Average	1.0000
Married	11	16.27	Below Average	2.8667
Single	404	14.98	Below Average	3.1114
Year Level				
Fourth Year	68	15.50	Below Average	2.5655
Third Year	99	17.07	Below Average	2.9116
Second Year	110	15.08	Below Average	3.0049
First Year	142	14.33	Below Average	3.5826

**Table 9. AQ's Endurance Dimensions of BSCS Students in ESSU Salcedo Campus during the First Semester, S.Y. 2015 – 2016**

Category	N	Mean	Description	SD
Entire Group	419	14.98	Below Average	3.3638
Age				
30 years old and above	5	17.60	Average	2.8809
25 – 29 years old	16	16.50	Below Average	3.9157
20 – 24 years old	115	14.88	Below Average	3.3944
15 – 19 years old	283	14.89	Below Average	3.3042
Sex				
Female	249	15.07	Below Average	3.4034
Male	170	14.85	Below Average	3.3109
Marital Status				
Widow/Widower	1	13.00	Below Average	0.0000
Separated	3	13.66	Below Average	2.0816
Married	11	16.63	Below Average	2.5405
Single	404	14.95	Below Average	3.3848
Year Level				
Fourth Year	68	15.50	Below Average	2.5655
Third Year	99	17.07	Average	2.9116
Second Year	110	15.08	Below Average	3.0049
First Year	142	14.33	Below Average	3.5826

## Summary Conclusions

Based on the results, regardless of the grouping, BSCS students had "Below Average" AQ. It could be concluded that students are comfort-driven, play it safe, low risk, compatible, settle for good, competent, limited creativity, and cautious about change (<http://www.peaklearning.com/aq-solutions.html>). They are characterized to be under utilization of potential, problems take a significant and unnecessary toll, making climbing difficult, and a sense of helplessness and despair arises from time to time (<http://stitchestm.blogspot.com/2007/09/adversity-quotient-aq-emerging.html>). On the bases of the data and results presented and discussed, the study revealed the following:

The demographic profile of the respondents showed that the result shows that a greater number of students are of ages 15 –

19 years old (67.5%), majority of them were females (59.4%), most of them were single (96.4%). With regards to distribution, AQ of ages ranging from 25-29, married students and female students were more dispersed, AQ of third year students was the most dispersed, while of first year was the least dispersed.

## Recommendations

The results do not mean a failure on the part of the school. However, things have to be done for the development of the students' AQ. The following therefore are recommended:

- The administration and faculty of BSCS should be cautious in dealing with the students. Their actions might lead to frustrations in some of these students.
- There is a need for well-designed activities in school. Curricular and co-curricular activities should be designed in a manner that will improve the AQ of the students.
- Further study should be made involving other factors to affirm the results of this study. Studies should also be done integrating activities for the development of the students' AQ.

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