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IMPLICATION OF CLASSROOM CLIMATE AND GENDER ROLE TO THE ACADEMIC PERFORMANCE OF LABORATORY HIGH SCHOOL

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Abstract

This study was conducted in response to the mandate of Globalization as the Philippines take part in the ASEAN INTEGRATION. A descriptive evaluative analysis was utilized that focuses on satisfaction levels of students on the effect of classroom climate in the learning process of a Laboratory High School in the Philippines. The result reveals that generally the respondents are satisfied with students' services provided by the institution as manifested in their academic performance as performing are very satisfactory, thus, classroom condition has no effect on the respondents' academic performance. More so, the -1.816 at 5% probability implies the male and female are showing the same academic performance, hence, gender differences in school achievements were not observed in this study. Further study was recommended for continues improvement of the students services provided.

Keywords

Pearson R – Value Analysis, Descriptive Evaluative Design, Significant Relationship, Laboratory High School

1. Introduction

Since education is inevitable, it should be provided to the young generation to ensure a brighter future. Learning facilities is one of the basic necessities to delivery good quality of education. As a culture in the Philippines, Filipino families' give importance on academic excellence, for most of the parents assume that a child academic excellence would guarantee a life success in the future. It is for a reason that having a good academic qualification will complement a good job with a good compensation. It is supported by Hassan as he quote from Hussien, 2004, that having academic excellence is correlated with a good life.

With gender as one factors mentioned in most literature to have considerable effects on students' academic performances, according to Atovigba et al, (2012) ranges from physical, biological, mental and behavioral characteristics pertaining to and differentiating between female and male population.

Gender differences have become on the hotlist of critical issues around the world. Haussmann, Tyson, & Zaidi (2009) reported that there is no country in the world that has yet reached equality between women and men in different critical areas such economic participation or education.

With the implementation of ASEAN Integration in the country , upgrading of school facilities , faculty profile , outcome based activities and students satisfaction are the highlight and main concerns of every institutions that provides basic education in response to the challenges brought about by the New Curriculum called K to 12 program. Southern Luzon State University- Judge Guillermo Eleazar Laboratory High School, was under the supervision of Commission on Higher Education as Laboratory high school for the students taking up Bachelor of Secondary Education to cater the needs of the Pre service Teachers for their Field study. Hence, to maintain the quality standard provided by the institution and for the students to become more competitive the need to assess the students satisfaction on the school surroundings and facilities , students' behavior in carrying out their task as student, teachers' attitude in doing their roles and students involvement for school activities is deemed necessary .

This study aims to measure the effect of students' perception of classroom climate, gender role in the academic performance of the students. Specifically it sought to answer the following objectives:

1. Describe the demographic profile of the respondents.
2. Determine the perceived level of effect of classroom climate in terms of
   2.1. Interaction with fellow students
   2.2.Teacher way of delivering their task as facilitator of learning
   2.3. Security inside the campus
   2.4.School surroundings
   2.5.Other school related activities
3. Determine the academic performance of male and female respondents for Second Grading of the Academic Year 2015 – 2016.
4. Find out if there is significant relationship between the student academic performance and their perceived classroom condition.
5. Find out if there is a significant difference in the male and female academic performance with their perceived level of classroom climate.

2. Literature Review

According to Herdlein and Zurner (2015), there is a paucity of available literature for Students Affairs and Services that proposed comprehensive development on how student's services are actually delivered by schools and university in international standards to cope with globalizations that includes promoting Classroom Climates. As cited by Sakic and Saric 2011, (Koth 2008) define Classroom climate as a broad concept that reflects numerous aspect in an educational process that includes shared beliefs, values and attitudes that shapes interactions between students, teachers and administrators and set the parameters of acceptable behavior and norms for the school. Consequently the study of Amborse et. *al.* (2010) define classroom climate as "the intellectual, social, emotional, and physical environments in which our students learn. Further the study of (Verkuyten and Thijs, 2002) mentioned that student-level factor as gender has shown to be significantly related to their perception of school climate. With study of Favor 2016, revealed that perception on the Classroom Climate has no significant relationship with the academic performance of respondents with satisfactory and very satisfactory academic achievement. Muyong et al. (2013) concluded as implied by the result of the study that academic success of the students still depends on the concerted effort of the two main stakeholders of the learning environment: the teachers and the students. The classroom climate influences the

student achievement, their self-esteem and participation in the lesson. The most important aspect of classroom climate is the relationship between teacher and students. There must be elements of caring, trust and respect in the interpersonal relationships between teachers and students. An effective classroom climate is one in which the teachers' authority to organize and manage the learning activities is accepted by the students.

As mentioned by Favor (2016) the study of Cash (1993) and Henie (1996) concluded that the secondary students both in rural and urban school shows better academic performance when housed in a higher quality building. Moreover, Conroy et.al (2002) stressed out that a modified classroom environment may serve as a direct intervention for a children who demonstrated a descriptive behavior and students in a best school environment shows learning improvement in a school year compared to the children exposed in a poorest classroom set up. Moreover, the study of Hartley and Sutton(2013) reported that some of the recently studies revealed that boys develop gender stereotype which girls becomes academically superior with regards to motivation, ability and performance, but previous studies shows that there is inconsistent result concerning differences in different domains of school achievements. And the study of Spinath and Neubauer (2010) highlighted the importance of personality and motivation for gender differences in school achievements. According to Adigun et al.(2015) the problem of students' under-performance in secondary schools is an educational issue that needs to be addressed and to solve this problem it is important to understand its causes. These causes are looked into from several perspectives including the role of the students, teachers, parents or family, school environment, society and government. Lim and Seng, (2015) study indicates that that constructivist approach, lecturers ' teaching styles, campus experiences, state-of-the-art facilities and career preparation influence students ' perceptions of quality campus experiences, more so, their study provides useful insight that offer opportunities for stakeholders to plan and initiate appropriate strategies for the betterment of the educational institution.

2.1 Theoretical Frame Work

The constructivist theory popularized by Jerome Bruner in 1966 that believes learning is an active process in which learners construct new ideas or concepts based upon their current/past knowledge, this theory was integrated in this study together with the Self-Determination Theory (SDT) that was developed by Edward L. Deci and Richard M. Ryan that concerns with human motivation, personality, and optimal functioning that was needed to attain educational success.

3. Methodology

3.1 Research Design

The Descriptive- Evaluative Method of Research was the deemed appropriate methods of research to measure the level of effect of classroom climate in the academic performance of Laboratory High School Students of Southern Luzon State University Laboratory High Judge Guillermo Eleazar. It becomes descriptive as it describes and interprets the condition concerning the relationship that exist, practices that prevail, beliefs , processes that are going on , effect that are being felt , and trends that are developed that comprises to the classroom climate condition. Evaluative research design was used to determine the significant relationship of the perception of classroom climate to the academic performance of the respondents and significant differences on the academic performance of the male and female students of SLSU-JGE Laboratory High School.

3.2 Population and Sampling

The study was employed to the total population of SLSU-JGE Laboratory students will a total number of 82 respondents that is distributed according to their grade level and is shown in table 1.

Table 1: *Distribution of the Respondents according to their Grade Level*

Grade Level	Frequency	Percentage
Grade 7	28	34
Grade 8	18	23
Grade 9	12	15
Grade 10	23	28
Total	81	100

3.3 Research Instruments

An adopted and enhanced research questionnaire was used in the conducted of the study. It was made of two parts, part I answers questions pertaining to the demographic profile of the respondents and part II includes five indicators that includes sub-questions that comprises student interaction with fellow students, teacher manner of delivering their task as facilitator of learning, school surroundings, safety felt by the students inside the school campus and other school related activities. Each questionnaire uses a Likert scale for the choices ranging from 1 to 5 that is best described as strongly disagree, disagree, neutral, agree and strongly agree

respectively. The respondent's grades in for the second grading evaluation were utilized for determination of significant relationship of the academic performance and classroom climate. The same grades were evaluated for the significant differences in the academic performances of the male and female respondents.

3.4 Data Gathering Procedure

After the preliminaries, the questionnaire are distributed and retrieved from the respondents. The academic performance of the respondents was gathered from the final ratings for the Academic Year 2016 – 2017. The data were gathered, tallied and analyzed with specific statistical tools. Then, it was presented in textual and tabular form for a clearer understanding.

3.5 Data Analysis

The data were collected, summarized and tabulated. Frequency, percentage and mean were used in determining the climate of the learning facilities.

Percentage is obtained through the following formula;

$$P = \frac{f}{N} \text{ x } 100 \ldots\ldots (1)$$

Where;

P = Percentage

f = frequency of respondents

N = total number of respondents

In determining the level of academic performance the student computed mean was utilized. Moreover, the significant relationship between academic performance of the respondents and the perceived classroom climate was calculated with the use of Pearson Product mean or the Pearson r , that is shown in formula form as ;

$$r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[n(\Sigma x^2) - (\Sigma x)^2][n(\Sigma y^2) - (\Sigma y)^2]}}$$

where n is the number of data pairs.

…. (2)

while, T-test was used as statistical tool to measure significant differences between of academic performance of male and female respondents that is given in this form;

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}} \quad \ldots. (3)$$

where:

S_1 = Standard deviation of first set of values

S_2 = Standard deviation of second set of values

n_1 = Total number of values in first set

n_2 = Total number of values in second set.

The formula for standard deviation is given by:

$$S = \sqrt{\frac{\sum(x - \bar{x})^2}{n - 1}} \quad \ldots.. (4)$$

Where,

x = Values given

[Math Processing Error] = Mean

n = Total number of values

4. Results And Discussion

4.1 Demographic Profile

Table 2: *Demographic Profile of the Respondents*

Demographics (n=81)		
Gender (%)		
Male	34	43
Female	47	57
Age		
11-13	46	56
14-16	35	44
Residence		
Metro Zone	70	86
Highway Zone	4	5
Railroad Zone	5	7
Mountain zone	2	2
Religion		
Roman Catholic	72	89
Iglesia ni Cristo	9	11

Table 2 indicates the percentage of the demographic profile of respondents by gender, age, residence and religion. Most of the respondents are female with ages between 11 to 16 that resides mostly from the Metro Zone and are Roman Catholic by religion.

4.2 Effect of Classroom Climate

Table 3: *Level of Perceived Effect of Classroom Climate*

Indicator	Grade 7		Grade 8		Grade 9		Grade 10		Average Weighted Mean	
	WM	I	WM	I	WM	I	WM	I	WM	I
	Strong Agree, Agree, Neutral, Disagree, Very Disagree 5, 4 , 3, 2, 1									
1. Interaction with fellow students	3.56	A	3.58	A	3.75	A	3.43	N	3.58	A
2. Teacher Effectiveness	3.74	A	3.58	A	4.17	A	3.70	A	3.80	A
3. School Surroundings	3.26	N	3.21	N	3.75	A	3.61	A	3.46	N
4. Security inside the campus	3.56	A	3.74	A	3.75	A	3.39	N	3.61	A
5. Involvement to other School Related Activities	3.52	A	3.58	A	3.58	A	4.17	A	3.71	A
Total	3.63						Higher effect			

5.0 – 4-2 Highest Effect, 4.1-3,0 .Higher effect t, 3.4 – 2.7 with Effect 2.6 – 1.9 least effect 1.8- 1.0 No effect

As shown in Table 3 the perceived level of effect of classroom climate are measured in terms of five indicators which the respondents agreed on teachers' effectiveness in caring out their task as facilitators of learning, more so, with students involvement to other school related activities, the respondents feel secured when inside the school campus and enjoy interacting with fellows students and answered neutral for the school surroundings. This implies that generally the respondents are satisfied with the Classroom Climate of Southern Luzon State University Judge Guillermo Eleazar Laboratory High school except for the number three indicator about the school surroundings.

4.3 Academic Performance

Table 4: *Level of Academic Performance*

Grade Range	Interpretation	Grade 7	Grade 8	Grade 9	Grade 10	Total
		Frequency	Frequency	Frequency	Frequency	
89.51 – 100	Excellent	2	0	2	6	10
84.51 – 89.50	Very Satisfactory	14	4	7	10	35
79.51 – 84.50	Satisfactory	11	13	3	7	34
74.51 – 79.50	Fair	1	1	0	0	2
65.00 – 74.50	Poor	0	0	0	0	0
Total		28	18	12	23	81
Mean Grade		85.26	83.00	86.24	87.00	85.38

Table 4 reveals that 10 (12%) of the respondents are excellent, 35 (43%) are performing very satisfactory, while 34(42%) are satisfactory and the remaining 2(5%) are under performing fair academically. This implies that the respondents are doing very satisfactory in their academic performance.

4.4 Significant Relationship

The Significant Relationship between the Student Academic Performance and their Perception on their Classroom Climate using the Pearson Product Moment Coefficient Correlation (PPMCC) or the r – value. as shown on table 5, the computed value of r for Grade 7 (-.0.0432) for Grade 8 (-0.00635), for Grade 9 (0.059956) and for Grade 10 (-0.14815) are less than the tabular value of r for Grade 7 (0.3233), for Grade 8 (0.4), for Grade 9 (0.4973) and for Grade 10 (0.3598) with 25, 16, 10 and 21 degrees of freedom for Grade 7, Grade 8, Grade 9 and Grade 10, respectively at 0.05 level of significance. This implied that the null hypothesis is accepted which means that there is no significant relationship between the student academic performance and their perception on their classroom climate. Likewise, this can be denoted that classroom climate has no effect on the academic performance of the respondents. Congruent to the result of the study, Fusaria et al, 2014 concluded that regardless of the classroom climate students can still attain academic success. On the contrary, the study of Akanbi (2014) confirms

that there is the benefit of a positive classroom climate that can unfold the joy of learning in an environment that enables learners to thrive and soar to greatness by achieving performance success.

Table 5: *Significant Relationship between the Student Academic Performance and their Classroom Climate*

Variables	Grade 7		Grade 8		Grade 9		Grade 10	
	Academic Performance x	**Mean Perception y**	**Academic Performance x**	**Mean Perception y**	**Academic Performance x**	**Mean Perception y**	**Academic Performance x**	**Mean Perception y**
Mean	85.26	3.09	83.00	3.09	86.24	3.08	87.00	3.08
Computed r value	-0.0432		-0.00635		0.059956		-0.14815	
Degrees of Freedom	25		16		10		21	
Tabular r value	.3233		.4000		.4973		.3598	
Decision on H_O	Accepted		Accepted		Accepted		Accepted	
Significance at 0.05 level (one-tailed)	Not Significant		Not Significant		Not Significant		Not Significant	

4.5 Significant Differences in Gender Role

Based from the result of the study table 6 shows the male had a mean score of 10.60 while the female had a mean score of 11.53 with standard deviations of 1.97571 and 2.48767 respectively. The computed t-value obtained was -1.816 which is not significant at 5% probability. The significant value .080 is greater than the .05 significant level of probability with degrees of freedom 80. Therefore, the null hypothesis was accepted, interpreted that there is no significant difference between the male and female academic performance and implies that both male and female are showing the same academic performance With the result of study conducted by Clemons (2008) as mentioned by (Faisal et al, 2011) that there were no gender differences that shows strongest connections with academic performance, thus, supporting the result of the current study. Moreover it was pointed out by (Hyde , et al., 1990) meta-analyses have consistently shown that there are no significant differences in general cognitive abilities. Further the study (Weis et al., 2013) suggested that longitudinal studies are needed to draw casual

conclusions concerning the effects of socialization in the different context on the gender differences in school achievements.

Table 6: *Significant Differences between the Male and Female Performance*

Variable	No. of Cases	Mean	Std. Deviation	df	*t value*	Significant Value (2 tailed)	Decision	Interpretation
Control Group	81	10.60	1.97571	80	-1.816	.080>.05	Accept H_o	No Significant Difference
Experimental Group	81	11.53	2.48767	80				

6. Conclusion

Based from the findings of the study the following conclusions were drawn

1. Mostly of the respondents are female who are between 11 to 16 years and residing in metro zone with Roman Catholics as their religion.
2. As perceived by the respondents they are generally satisfied with the current classroom climate with the inclusions of the five categories as Interaction with fellow students, Teacher way of delivering their task as facilitator of learning, Security inside the campus, School surroundings, and other school related activities.
3. There is no significant relationship between the classroom climate and academic achievements that means classroom climate does not affect the academic performance of the respondents. Regardless of what respondents feel about their surroundings they could still performance very well academically.
4. Academic performance of the respondents is very satisfactory.
5. There is no significant differences in gender role when it comes to academic performance for male and female are academically performing very satisfactory.

Recommendations

1. Other factors maybe consider for the demographic profile of the respondents such socio-economic status of the family.
2. Consideration on the number three variable about the physical surrounding maybe given much attention for improving the school facilities.
3. Experimental design may also be used to determine the effect of classroom climate on the academic performance of the students.

References

Adigun et al. (2015), Effect of Gender on Students' Academic Performance in Computer Studies in Secondary Schools in New Bussa, Borgu , Local Government of Niger State, Journal of Education and Practice www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.6, No.33, 2015

Akanbi, Mutitala Iskola (2014) Classroom Climate and Academic Performance among Female Students In ASA, Local Government Kwara State, Research On Humanities And Social Sciences, Vol 4, No. 19, 2014

Ambrose, Susan A. et al. 2010. How Learning Works: Seven Research- Based Principles for Smart Teaching San Francisco: Jossey Bass.

American Psychological Association. (2010). Publication Manual of the American Psychological Association. (6th Ed.). Washington, DC: Author

Aquino, G.V. (1997).Teaching Models: Strategies and Skills. Manila: Rex Bookstore

Asaad, A. S. (2008).Statistics Made Simple. Manila: Rex Book Store.

Atovigba et al, (2012), Effect of Gender on Students' Academic Performance in Computer Studies in Secondary Schools in New Bussa, Borgu Local Government of Niger State, Journal of Education and Practice, Vol.6, No.33, 2015

Barnuevo, R. J., et al.(2012). Instructional Competencies of the Teaching Force: Their Relationship to the Students' Academic Performance (Undergraduate Thesis, Don Bosco College). Bell, M.J. "What Is Academic Performance,

Bennet, J. (2001). "The Relationship Between Classroom Climate And Student Achievement" (Doctoral Dissertation , University Of North Texas). Bilbao, Et Al. (2012).The

Teaching Profession. Metro Manila: Lorimar Publishing Co., Inc. David, F.P. (2002) Understanding and Doing Research: A Handbook for Beginners. Iloilo City. Author.

Faisal et al., 2011, Gender Differences In Academic Performance Among Undergraduates At The University Of Jordan: Are They Real Or Stereo Typing?, College Student Journal

Falsario et al., (2014), Classroom Climate and Academic Performance of Education Students, De La Salle University Research Congress 2014

Favor, Rence Carlo C. (2016), Classroom Climate and Academic Performance of Secondary High School, Southern Luzon State University Judge Guillermo Eleazar, Tagkawayan, Quezon, Philippines, Unpublished Thesis.

Hartley and Sutton(2013), A Stereotype Threat Account of Boys' Academic Underachievement , Child Development Journal, Volume 84, Issue 5 September/October 2013 , Pages 1716–1733

Hausmann, R., Tyson, L. & Zahidi, S. (2009). The global gender gap report. A report published by the World Economic Forum, Geneva, Switzerland. Retrieved May 28, 2009, from http://www.weforum.org/pdf/gendergap/report2009.pdf

Herdlein and Zurner (2015), Student Satisfaction, Needs, and Learning Outcomes: A Case Study Approach at a European University, sgo.sagepub.com, https://doi.org/10.1177/2158244015580373

Hyde, J.S, Fennena, E, & Lamon, S. (1990) Metha- Analysis and Psychology of Gender Differences.

Kekare, Swati H. (2015) Classroom Climate Physical Environment and Academic Achievements of Students, International Journal of Indian Psychology, Vol. 2Issue 3 Pg. 116 -12

Koth, C. W., Bradshaw, C. P., & Leaf, P. J. (2008). Examining the relationship between Classroom-level factors and students' perception of school climate. Journal of Educational Psychology, 100, 96-104. https://doi.org/10.1037/0022-0663.100.1.96

Lipoff, S. (2011). Environmental Learning Theory: Stuff Vs. Your Child. Retrieved Http://Sarahlipoff.Com/2011/12/05/EnvironmEntal-Learning-Theory-Stuff-Vs-Your Child/

Nian-Shing Chen et al. (2008).Classroom Climate and Learning Effectiveness in Holistic Blended Learning Environments. University, Taiwan International Journal on Digital Learning Technology 2008, Volume 1, Number 1, 72-92

Sakic and Saric, (2011), Relations of parenting styles and friendship quality to ... Applied Research in Quality of Life 2011; 6(4): 425-449.

Spinath B., Freudenthaler H. H., Neubauer A. C. (2010). Domain-specific school achievement in boys and girls as predicted by intelligence, personality and motivation. Pers. Individ. Differ. 48, 481–486 https://doi.org/10.1016/j.paid.2009.11.028

Verkuyten, M., & Thijs, J. (2002). School Satisfaction of Elementary School Children: The Role of Performance, Peer Relations, Ethnicity and Gender. Social Indicators Research, 59(2),203. https://doi.org/10.1023/A:1016279602893

Weis, et al. (2013), Gender Differences in School Achievements. The Role of Self- Regulation, Frontier Educational Psychology, Doi: 10.3389/fpsyg10, 497-518.