# The Effectiveness of Library Services in the Learning of College Students

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Abstract: This study examined the effectiveness of library services in the learning of college students of Northwestern Agusan Colleges (NAC). Random sampling is used in this research, where the researchers undergo a survey questionnaire that will be answered by the respondents, which the total number of respondents two hundred (200). It results of our study that library services had a significant effect on the learning of college students and it also results that the library has a good performance when it comes to academics. Moreover, this research talks between library services and the learning of college students, which results that library services influenced the academic success of college students in a good way. Through the library services like books, we can easily get more information and idea to solve different problems, that's why we must treasure the library because without the library we can't get valuable and authentic information on our studying.

## Keywords—Library Services, Library, Effectiveness of library services

## 1. Introduction

The library is a critical component in any academic institution and serves as a vital resource for students in their pursuit of knowledge. It offers access to books, journals, and other sources of information that support academic research. Besides, libraries provide students with various services aimed at enhancing their academic and personal development, including computer access, group study rooms, reference services, and information literacy programs. As such, it is vital to evaluate the effectiveness of library services, particularly in terms of their impact on students. This research paper aims to explore the effectiveness of library services on students' academic performance and general well-being. Furthermore, the library is an essential institution that plays a crucial role in providing access to information and resources for student's academic success. Library services offer many resources and services to support academic research and study, including access to books, journals, technology, study spaces, and other essential tools. Additionally, library services offer a range of information literacy programs, reference services, and other support services aimed at enhancing students' academic success and personal development. As such, evaluating the effectiveness of library services is critical to understanding their impact on student's academic and personal growth. This research paper aims to explore the effectiveness of library services on students' academic performance, research skills, and general well-being,

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identifying the specific services that promote these outcomes. Through this research, we seek to contribute to the existing body of knowledge on library services' impact on students, enabling future improvements and enhancements in library services to meet the diverse needs of students.

According to Robinson and Dickinson (2016), library services provide a safe and stimulating environment for early childhood development, specifically Storytime sessions promoting reading, communication, and creativity. According to L.J. Zimmerman and A.J. Kremer (2016), libraries play a significant role in providing access to health information to vulnerable populations. Also, according to St. Clair (2015), academic libraries have a positive impact on faculty research and teaching, with librarians playing an essential role in providing information literacy instruction and research support.

According to the research article published in the Journal of Academic Librarianship, the usage of library services has a noteworthy and affirmative impact on the academic achievement of students. The research conducted on over one thousand undergraduate students from a prominent university revealed that students who availed of library services such as research assistance, instruction, and access to resources attained higher GPAs than those who refrained from utilizing these services. The study also reflected that students who received library services felt more self-assured in their research skills and were more prone towards engaging in academic activities such as research-based seminars, and submitting research papers. Furthermore, students who made use of library services demonstrated higher levels of persistence in their academic pursuits and a lesser probability of dropping out of academia. According to the researchers, academic institutions must prioritize library services as they play a vital role in promoting student success in higher education. The study highlights the necessity for continued investment by library professionals in library resources and services as an aid to ensure that students are able to access the required support for academic excellence.

## 2. METHODOLOGY

## 2.1 Research Question

Research Question: Name: Age: Sex:

1.From 1-5, how are you satisfied with the library services?

2.From 1-5, how was your experience using library?

## 2.2 Research Design

In this research, the researchers create a survey to get the response of the respondents regarding to our data questions and to get their insights about the usage and library services.

## 2.3 Participant of the Study

This study was conducted on last week of April 2023, at Northwestern Agusan Colleges. The participants of this study are the College students from different courses.

| Group | Population |
|-------|------------|
| BSBA  | 61         |
| BSED  | 88         |
| BEED  | 51         |

## 2.4 Data Gathering Procedure

The researchers asked for permissions to the school principal, and after being approved, the researchers started to conduct the survey to the college students.

## 2.5 Research Locale

In this study, the researchers conducted a survey on the Northwestern Agusan Colleges (NAC), located in the Bayview Hill, Nasipit Agusan Del Norte.

## **2.6** Statistical Tools

- Frequency this will describe the composition of the population.
- Pearson Correlation Coefficient Calculator measures the correlation of two variables.
- Likert Scale measures the participants attitude and opinions.
- Chi-Square a statistical test used to compare observe results with expected results.

## 3. RESULTS AND DISCUSSIONS

 
 Table 1 presents the relationship between the course and Satisfaction rating of library services

## Table 1– Course and Satisfaction Rating

## Satisfaction Rating

| Course | Extrem<br>-ely<br>Sat. | Very<br>Sat. | Sat | Slightly<br>Sat. | Not<br>Sat. | Total |
|--------|------------------------|--------------|-----|------------------|-------------|-------|
|--------|------------------------|--------------|-----|------------------|-------------|-------|

| BSBA        |   | 21       | 25         | 15      |       | 0                        | 0      | 61                   | library   | serv          | ices. T                     | he high        | est chi          | -square val                                       | lue obse   | erve is   |
|-------------|---|----------|------------|---------|-------|--------------------------|--------|----------------------|---|---------------|-----------------------------|----------------|------------------|---|------------|-----------|
| BSED        |   | 33       | 30         | 25      |       | 0                        | 0      | 88                   | 103.89,   | indi          | icating                     | a signifi      | icant as         | sociation b                                       | etween     | course    |
| DSED        | -   | 55       | 50         | 23      |       | 0                        | 0      | 00                   | that the  | cou           | rse and                     | satisfac       | tion rati        | ng of libra                                       | ry servic  | es had    |
| BEED        |   | 14       | 15         | 10      |       | 12                       | 0      | 51                   | a strong relationship of each other. Based on the article<br>entitled a "A Remarkable Review of Library Services: A Hub |               |                             |                | article<br>A Hub |   |            |           |
| Total       |   | 68       | 70         | 50      |       | 12                       | 0      | 200                  | of Utmost Satisfaction", the satisfaction rating of library   |               |                             |                | library          |   |            |           |
|             |   | •        |            |         |       |                          |        | •                    | services is a testament to their adaptability and continued   |               |                             |                |                  | tinued  |            |           |
|             |   | OV       | EV         | OV-F    | EV    | (OV-                     |        | (OV-                 | relevand  | ce ii         | n the d                     | igital a       | ge. By           | embracing   | technol    | logical   |
|             |   |          |            |         |       | <b>EV</b> ) <sup>2</sup> |        | EV) <sup>2</sup> /EV | advance   | emen          | its, dive                   | ersifying      | their o          | fferings, ar                                      | nd remai   | ning a    |
| BSBA        | &   | 21       | 6.405      | 14.59   | 95    | 213.0                    | )147   | 33.2575              | vital co  | mmu           | inity res                   | source, l      | ibraries         | have mana   | iged to f  | oster a   |
| ES          | FG  |          | 1 1 50     | 10.4    | 0     |                          |        |                      | sense of  | sati          | sfaction                    | among          | their pa         | trons. As k                                       | nowledg    | e hubs    |
| BSED &      | ES  | 33       | 14.52      | 18.4    | 8     | 341.5                    | 5104   | 23.52                | that go   | beyc<br>fullu | roinvo                      | ntod the       | neolyog          | sical books                                       | , ildrarie | s nave    |
| BEED        | æ   | 14       | 2 57       | 10.4    | 2     | 100 7                    | 70.40  | 20 4710              | fulfillin   | a se          | rvices                      | making         | them             | an invalu   | whether is | set to    |
| ES<br>DCD A | 0_  | 14       | 3.57       | 10.4    | 3     | 108.7                    | /849   | 30.4719              | society'  | g su<br>s int | ellectus                    | 1 growth       | y and de         | velonment   | laute as   | 501 10    |
| DSDA        | α   | 25       | 7 625      | 17 13   | 75    | 203 6                    | 5030   | 38 5173              | society   | 5 mi          | encetuc                     | ii giowu       | i and de         | , elopment.                                       | •          |           |
| RSED        | 87  | 23       | 7.025      | 17.15   | 15    | 293.0                    | 1939   | 36.3173              |   |               |                             |                |                  |   |            |           |
| VS          | a   | 30       | 13.2       | 16.9    | 2     | 282                      | 24     | 21 3818              | Ta  | ble 2         | represe                     | ents the       | relation         | ship betwee                                       | en sex ar  | nd        |
| BEED        | &   | 50       | 15.2       | 10.0    | ,     | 202                      | .27    | 21.5010              |   |               | satisfac                    | tion rati      | ng of lil        | brary servic                                      | ces        |           |
| VS          | a   | 15       | 3.825      | 11.13   | 75    | 124.8                    | 3806   | 32,6485              |   |               |                             |                | U                | 2   |            |           |
| BSBA &      | S   |          |            |         |       |                          |        |                      | Table 2   | -Se           | x and S                     | atisfact       | ion Rat          | ing   |            |           |
| BSED &      | S   | 15       | 4.575      | 10.42   | 25    | 108.6                    | 5806   | 23.7553              |   |               |                             |                |                  |   |            |           |
| BEED &      | S   | 25       | 11         | 14      |       | 19                       | 6      | 17.81                |   |               |                             | <u>Satisfa</u> | ction R          | ating   |            |           |
| BSBA        | &   | 10       | 2.55       | 7.45    | 5     | 55.5                     | 025    | 21.7657              |   |               |                             |                |                  |   |            |           |
| SLS         |   | 0        | 0          | 0       |       | 0                        | )      | 0                    | Sex   | Ex            | trem                        | Very           | Sat.             | Slightly  | Not        | Total     |
| BSED        | &   |          |            |         |       |                          |        |                      |   | -el           | y Sat.                      | Sat.           |                  | Sat.  | Sat.       |           |
| SLS         |   | 0        | 0          | 0       |       | 0                        | )      | 0                    |   |               |                             |                |                  |   |            |           |
| BEED        | &   |          |            |         |       |                          |        |                      | F   |               | 32                          | 56             | 12               | 9   | 0          | 109       |
| SLS         |   | 12       | 3.66       | 8.34    | 1     | 69.5                     | 556    | 19.0043              |   |               |                             |                |                  |   | _          |           |
| BSBA        | &   |          |            |         |       |                          |        |                      | Μ   |               | 16                          | 48             | 14               | 13  | 0          | 91        |
| NS          |   | 0        | 0          | 0       |       | 0                        | )      | 0                    |   |               | 10                          | 101            |                  |   |            | • • • •   |
| BSED        | &   | 0        | 0          | 0       |       | 0                        |        | 0                    | Total   |               | 48                          | 104            | 26               | 22  | 0          | 200       |
| NS          | 0   | 0        | 0          | 0       |       | 0                        | )      | 0                    |   |               |                             |                |                  |   |            |           |
| BEED        | ð   | 0        | 0          | 0       |       | 0                        |        | 0                    |   | <u> </u>      |                             | EX             | OV               | (0)   |            | 7         |
| IND         |   | 0        | 0          | 0       |       | 0                        |        | 262 1305             |   |               | OV                          | EV             | EV               | $(\mathbf{U}\mathbf{v} - \mathbf{F}\mathbf{V})^2$ |            | -<br>2/FV |
|             |   |          |            |         |       |                          |        | 202.1305             | E&ES  |               | 32                          | 26.16          | 5.8/             | $\frac{1}{1}$ 34 105                              | (6 13)     | 37        |
|             |   |          |            |         |       |                          |        |                      | M&ES  | 2             | 16                          | 20.10          | 5.8              | 4 34.105  | 1.50       | 516       |
|             |   |          |            |         |       |                          |        |                      | F&VS  | ,             | 56                          | 56.68          | -0.6             | 8 0 1621  |            | 182       |
|             |   | (        | hi_Saua    | •a Test |       |                          |        |                      | M&VS  | s             | 20<br>48                    | 47 32          | -0.0             | 0.4624  |            | 97        |
|             |   | <u> </u> | JIII-Oqual | e rest  |       |                          |        |                      | F&S   | 5             | 12                          | 14 17          | -2.1             | 7 4 7089  | 0.00       | 23        |
| Course      |   | Value    | ժք         | Signi   | ficar | nt Vol                   | 116    | n                    | M&S   |               | 14                          | 11.83          | 2.1              | 7 4.7089  | 0.39       | 81        |
| Course      |   | value    | ui         | orgin   | mal   | n väl                    | uc     | Ч                    | F&SL  | s             | 9                           | 11.99          | -2.9             | 9 8.9401  | 0.74       | 56        |
| BSBA        | <b>X</b> <sup>2</sup>                                     | 95 530   | )1 8       |         | 0.04  | 5                        | e      | .00001               | M&SI  | s             | 13                          | 10.01          | 2.90             | 8.9401  | 0.89       | 31        |
| DODA        | N   | 61       | ,          |         | 0.0.  | ,                        |        |                      | F&NS  |               | 0                           | 0              | 0                | 0   | 0.07       | 0         |
|             | 11  | 01       |            |         |       |                          |        |                      | M&NS  | S             | õ                           | Ő              | 0                | 0<br>0  |            | 0         |
| BSED        | X2  | 62.71    | 8          |         | 0.0   | 5                        | ~      | < 00001              | 112001 ()   |               | Ū                           | Ŭ              | Ű                |   | 5.25       | 23        |
|             | N   | 88       | 0          |         | 5.0.  | -                        |        |                      |   |               |                             | r              | 1                | I   |            |           |
|             | - '   | 50       |            |         |       |                          |        |                      |   |               |                             |                |                  |   |            |           |
| BEED        | BEED X <sup>2</sup> 103.89 8 0.05 <.00001 Chi-Sauare Test |          |            |         |       |                          |        |                      |   |               |                             |                |                  |   |            |           |
| _           | N   | 51       | -          |         |       |                          |        | '                    |   |               |                             |                |                  |   |            |           |
|             |   |          |            |         |       |                          |        |                      | Sex   |               | Val                         | ue d           | f Sign           | ificant Va  | lue        | р         |
| The chi-sq  | juare<br>n be   | e test c | onducted   | on the  | e dat | ta exa                   | umines | s the                | Femal   | e 2           | X <sup>2</sup> 2.3<br>N 109 | 898 ·          | 4                | 0.05  | .6         | 64471     |

| Male | X <sup>2</sup> 2.8625<br>N 91 | 4 | 0.05 | .581093 |
|------|-------------------------------|---|------|---------|
|      |                               |   |      |         |

Table 2 examines the relationship between sex and it's satisfaction to the library services. The highest chi-square value observe is 2.8625, indicating a worthless association between sex and satisfaction rating of library services. It also illustrates that there are no significant relationship between sex and satisfaction rating of library services. Based on the study entitled "A Comprehensive Analysis of User Satisfaction Ratings in Libraries for Different Genders: A Review of Literature", gender differences exist in library satisfaction ratings, with female users reporting higher levels of satisfaction. The findings emphasize the importance of tailoring library services to meet the needs and preferences of different genders. Libraries can benefit from offering diverse resources, creating welcoming environments, and providing excellent customer service to enhance user satisfaction. Further research is needed to explore additional factors and address potential limitations in the current literature.

## Table 3–Age group and Satisfaction Rating

## Satisfaction Rating

| Age            | Extrem<br>-ely<br>Sat. | Very<br>Sat. | Sat.    | Slightly<br>Sat. | Not<br>Sat. | Total     |
|----------------|------------------------|--------------|---------|------------------|-------------|-----------|
| 19-21          | 15                     | 16           | 16      | 12               | 0           | 59        |
| 22-24          | 16                     | 17           | 14      | 13               | 0           | 60        |
| 25-27          | 9                      | 12           | 5       | 2                | 0           | 28        |
| 28-30          | 9                      | 10           | 6       | 1                | 0           | 26        |
| 31-33<br>Total | 7<br>56                | 13<br>68     | 3<br>44 | 4<br>32          | 0<br>0      | 27<br>200 |

|       | OV | EV    | OV-   | (OV-             | (OV-                 |
|-------|----|-------|-------|------------------|----------------------|
|       |    |       | EV    | EV) <sup>2</sup> | EV) <sup>2</sup> /EV |
| 19-21 | 15 | 16.52 | -1.52 | 2.3104           | 0.1398               |
| &ES   |    |       |       |                  |                      |
| 22-24 | 16 | 16.8  | -0.8  | 0.64             | 0.0381               |
| &ES   |    |       |       |                  |                      |
| 25-27 | 9  | 7.84  | 1.16  | 1.3456           | 0.1716               |
| &ES   |    |       |       |                  |                      |
| 28-30 | 9  | 7.28  | 1.72  | 2.9584           | 0.4064               |

| &ES            |    |       |        |         |         |
|----------------|----|-------|--------|---------|---------|
| 31-33          | 7  | 7.56  | -0.56  | 0.3136  | 0.0415  |
| &ES            |    |       |        |         |         |
| 19-21          | 16 | 20.06 | -4.06  | 16.4836 | 0.8217  |
| &VS            |    |       |        |         |         |
| 22-24          | 17 | 20.4  | -3.4   | 11.56   | 0.56    |
| &VS            |    |       |        |         |         |
| 25-27          | 12 | 19.52 | 2.48   | 6.1504  | 0.6461  |
| &VS            |    |       |        |         |         |
| 28-30          | 10 | 8.84  | 1.16   | 1.3456  | 0.1522  |
| &VS            |    |       |        |         |         |
| 31-33          | 13 | 9.18  | 3.82   | 14.5924 | 1.5896  |
| &VS            |    |       |        |         |         |
| 19-            | 16 | 12.98 | 3.02   | 9.1204  | 0.7026  |
| 21&S           | 14 | 13.2  | 0.8    | 0.64    | 0.048   |
| 22-            | 5  | 6.16  | -1.16  | 1.3456  | 0.2184  |
| 24&S           | 6  | 5.72  | 0.28   | 0.0784  | 0.0137  |
| 25-            | 3  | 5.94  | -2.94  | 8.6436  | 1.4552  |
| 27&S           | 12 | 9.44  | 2.56   | 6.5536  | 0.6942  |
| 28-            |    |       |        |         |         |
| 30&S           | 13 | 9.6   | 3.4    | 11.56   | 1.2042  |
| 31-            |    |       |        |         |         |
| 33&S           | 2  | 4.48  | -2.48  | 6.1504  | 1.3728  |
| 19-21          |    |       |        |         |         |
| &SLS           | 1  | 4.16  | -3.169 | 9.9856  | 2.4004  |
| 22-24          |    |       |        |         |         |
| &SLS           | 4  | 4.32  | -0.32  | 0.1024  | 0.0237  |
| 25-27          |    |       |        |         |         |
| &SLS           | 0  | 0     | 0      | 0       | 0       |
| 28-30          |    |       |        |         |         |
| &SLS           | 0  | 0     | 0      | 0       | 0       |
| 31-33          | 0  | 0     | 0      | 0       | 0       |
| &SLS           | 0  | 0     | 0      | 0       | 0       |
| 19-21<br>9 MG  | 0  | 0     | 0      | 0       | 0       |
| &NS            | 0  | 0     | 0      | 0       | 0       |
| 22-24<br>9 NG  | 0  | 0     | 0      | 0       | 0       |
| &INS           | 0  | 0     | 0      | 0       | 0       |
| 23-27<br>9-NIC |    |       |        |         |         |
| 28 20          |    |       |        |         |         |
| 20-30<br>P-NIC |    |       |        |         |         |
| XINS<br>31.32  |    |       |        |         |         |
| 51-55<br>&NS   |    |       |        |         |         |
| ans            |    |       |        |         | 12 7002 |
|                | 1  | 1     | 1      | 1       | 14./004 |

## **Chi-Square Test**

| Age   | Value                         | df | Significant Value | р       |
|-------|-------------------------------|----|-------------------|---------|
| 19-21 | X <sup>2</sup> 2.3583<br>N 59 | 16 | 0.05              | .999967 |
| 22-24 | X <sup>2</sup> 1.8503<br>N 60 | 16 | 0.05              | .999994 |

Table 3 represents the relationship between the age group and satisfaction rating of library services

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| 1011 1 100 | ue >,   | Septembe     |    | e, 1 ages: 11 21 |         |
|------------|---------|--------------|----|------------------|---------|
| 25-27      | X²<br>N | 2.4089<br>28 | 16 | 0.05             | .999962 |
| 28-30      | X²<br>N | 2.9727<br>26 | 16 | 0.05             | .999841 |
| 31-33      | X²<br>N | 3.11<br>27   | 16 | 0.05             | .999784 |

Table 3 examines the relationship between age group and satisfaction rating of library services. The highest chi-square value observe is 3.11, indicating a worthless association between age group and satisfaction rating of library services. This table illustrates that there are no significant relationship between age group and satisfaction rating of library services. Based on the study entitled *"Evaluating Library Satisfaction Rating Across Different Age Groups: A Review of Literature"*, a comprehensive overview of existing research examining the library satisfaction levels of children, teenagers, young adults, middle-aged adults, and older adults. Through synthesizing various studies, this review identifies the factors influencing library satisfaction and highlights potential areas for improvement in catering to the needs and expectations of library users across various age brackets.

#### Table 4 represents the relationship between different course and it's duration inside the library

## **Table 4–Course and Duration**

#### Duration

| Course | Eve-<br>ryday | 1 a<br>Week | 1per<br>Sem. | 2 a<br>Week | 1 a<br>Mon | Total |
|--------|---------------|-------------|--------------|-------------|------------|-------|
| BSBA   | 16            | 13          | 10           | 9           | 13         | 61    |
| BSED   | 19            | 21          | 14           | 26          | 8          | 88    |
| BEED   | 26            | 18          | 2            | 0           | 5          | 51    |
| Total  | 61            | 52          | 26           | 35          | 26         | 200   |

| Course | OV | EV     | OV-EV  | (OV-                     | (OV-                 |
|--------|----|--------|--------|--------------------------|----------------------|
|        |    |        |        | <b>EV</b> ) <sup>2</sup> | EV) <sup>2</sup> /EV |
| BSBA   | 16 | 18.605 | -2.605 | 6.8017                   | 0.3779               |
| & E    |    |        |        |                          |                      |
| BSED   | 19 | 26.84  | -7.84  | 61.4656                  | 2.3641               |
| & E    |    |        |        |                          |                      |
| BEED   | 26 | 15.555 | 10.445 | 109.0981                 | 7.2732               |
| & E    |    |        |        |                          |                      |
| BSBA   | 13 | 15.86  | -2.86  | 8.1796                   | 0.5453               |
| & 1W   |    |        |        |                          |                      |
| BSED   | 21 | 22.88  | -1.88  | 3.5344                   | 0.1607               |
| &1W    |    |        |        |                          |                      |
| BEED   | 18 | 13.26  | 4.74   | 22.4676                  | 1.7283               |
| & 1W   |    |        |        |                          |                      |
|        |    |        |        |                          |                      |

| BSBA  | 10 | 7.93   | 2.07   | 4.2849  | 0.6122 |
|-------|----|--------|--------|---------|--------|
| & 1PS |    |        |        |         |        |
| BSED  | 14 | 11.44  | 2.56   | 6.5536  | 0.5958 |
| & 1PS |    |        |        |         |        |
| BEED  | 2  | 6.63   | -4.63  | 21.4369 | 3.5728 |
| & 1PS |    |        |        |         |        |
| BSBA  | 9  | 10.675 | -1.675 | 2.8056  | 0.2806 |
| & 2W  |    |        |        |         |        |
| BSED  | 26 | 15.4   | 10.6   | 112.36  | 7.4907 |
| & 2W  |    |        |        |         |        |
| BEED  | 0  | 0      | 0      | 0       | 0      |
| & 2W  |    |        |        |         |        |
| BSBA  | 13 | 7.93   | 5.07   | 25.7049 | 3.6722 |
| & 1M  |    |        |        |         |        |
| BSED  | 8  | 11.44  | -3.44  | 11.8336 | 1.0758 |
| & 1M  |    |        |        |         |        |
| BEED  | 5  | 6.63   | -1.63  | 2.6569  | 0.4007 |
| &1M   |    |        |        |         |        |

## **Chi-Square Test**

| Course | Value                          | df | Significant Value | р       |
|--------|--------------------------------|----|-------------------|---------|
| BSBA   | X <sup>2</sup> 5.4882<br>N 61  | 8  | 0.05              | .704347 |
| BSED   | X <sup>2</sup> 11.7871<br>N 88 | 8  | 0.05              | .160963 |
| BEED   | X <sup>2</sup> 12.975          | 8  | 0.05              | .112713 |

Table 4 explores the relationship between course and it's duration inside the library. The highest chi-square value observe is 12.975, indicating a worthless association between course and it's duration oinside the library. Also the course that has the highest chi-square is the BEED or Bachelor of Elementary Education. This table illustrates that there are no significant relationship between course and it's duration inside the library. According to the article entitled "Analysis and Cataloging of Course Reference Materials in the Library", by implementing an efficient cataloging system and creating a user-friendly digital platform, this study endeavors to enhance users' academic journey by offering easy access to comprehensive course reference materials. The outcomes of this research will pave the way for an improved library experience that caters to the diverse needs of students and faculty across various academic disciplines and courses

Table 5 represents the relationship between sex and it's duration inside the library

#### Table 5 –Sex and Duration

## **Duration**

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| Sex   | Every-<br>Day | 1 a<br>Week | 1<br>per<br>Sem. | 2 a<br>Week | 1 a<br>Mon. | Total |
|-------|---------------|-------------|------------------|-------------|-------------|-------|
| F     | 52            | 9           | 19               | 21          | 8           | 109   |
| М     | 2             | 18          | 14               | 19          | 38          | 91    |
| Total | 54            | 27          | 33               | 40          | 46          | 200   |

|       | OV | EV     | OV-    | (OV-                     | (OV-    |
|-------|----|--------|--------|--------------------------|---------|
|       |    |        | EV     | <b>EV</b> ) <sup>2</sup> | EV)²/EV |
| F & E | 52 | 29.43  | 22.57  | 509.4049                 | 17.5657 |
| M&E   | 2  | 24.57  | -22.57 | 509.4049                 | 21.2252 |
| F     | 9  | 14.715 | -5.715 | 32.6613                  | 2.3329  |
| &1W   |    |        |        |                          |         |
| М     | 18 | 12.285 | 5.715  | 32.6613                  | 2.7218  |
| & 1W  |    |        |        |                          |         |
| F     | 19 | 17.985 | 1.015  | 1.0303                   | 0.0606  |
| &1PS  |    |        |        |                          |         |
| Μ     | 14 | 15.015 | -1.015 | 1.0303                   | 0.0687  |
| &1PS  |    |        |        |                          |         |
| F     | 21 | 21.8   | -0.8   | 0.64                     | 0.0305  |
| & 2W  |    |        |        |                          |         |
| Μ     | 19 | 19.11  | -0.11  | 0.121                    | 0.0061  |
| & 2W  |    |        |        |                          |         |
| F     | 8  | 25.07  | -17.07 | 291.3849                 | 11.6554 |
| &lM   |    |        |        |                          |         |
| Μ     | 38 | 20.93  | 17.07  | 291.3849                 | 14.5693 |
| & 1M  |    |        |        |                          |         |
|       |    |        |        |                          | 70.2665 |

## **Chi-Square Test**

| Sex    |         | Value          | df | Significant Value | р       |
|--------|---------|----------------|----|-------------------|---------|
| Female | X²<br>N | 31.6451<br>109 | 4  | 0.05              | <.00001 |
| Male   | X²<br>N | 38.6214<br>91  | 4  | 0.05              | <.00001 |

Table 5 examines the relationship between sex and it's duration in the library. In the table, the highest chi-square value observe is 38.6214, indicating a significant association between sex and it's duration in the library. Also, the sex that has the highest chi-square value observe is the male, which represents a strong relationship between sex and it's duration in the library. Based on the study entitled "*The Fascinating World of Library Encounters: A Study on the Duration of Different Sexes within the Realm*", the duration of different sexes in library interactions has unraveled intriguing patterns within these scholarly domains. While the average duration of encounters hovers around 6 minutes, various factors such as

library type, demographic profiles, and individual intentions contribute to the duration of these interactions. Future research may delve deeper into the motives behind such encounters, exploring the impact of factors like interpersonal attraction, information seeking behavior, and social norms to provide a comprehensive understanding of library dynamics.

Table 6 represents the relationship between age group and it's duration in the library

#### Table 6-Age group and Duration

| Duration |  |
|----------|--|
|          |  |

| Age   | Every- | 1 a  | 1 per | 2 a  | 1a   | Total |
|-------|--------|------|-------|------|------|-------|
|       | Day    | Week | Sem.  | Week | Mon. |       |
| 19-   | 25     | 19   | 12    | 0    | 3    | 59    |
| 21    |        |      |       |      |      |       |
|       | 18     | 26   | 14    | 1    | 1    | 60    |
| 22-   |        |      |       |      |      |       |
| 24    | 12     | 8    | 1     | 3    | 4    | 28    |
| 25    |        | 0    | Ō     |      | 2    | 26    |
| 25-   | 4      | 9    | 8     | 2    | 3    | 26    |
| 27    | 5      | 0    | 2     | o    | 12   | 7     |
| 28    | 5      | 0    | Z     | 0    | 12   | /     |
| 20-   | 64     | 62   | 37    | 14   | 23   | 200   |
| 50    | 04     | 02   | 57    | 14   | 25   | 200   |
| 31-   |        |      |       |      |      |       |
| 33    |        |      |       |      |      |       |
|       |        |      |       |      |      |       |
| Total |        |      |       |      |      |       |

|       | OV | EV     | OV-   | (OV-                     | (OV-                 |
|-------|----|--------|-------|--------------------------|----------------------|
|       |    |        | EV    | <b>EV</b> ) <sup>2</sup> | EV) <sup>2</sup> /EV |
| 19-21 | 25 | 18.88  | 6.12  | 37.4544                  | 2.0808               |
| &Е    |    |        |       |                          |                      |
| 22-24 | 18 | 19.2   | -1.2  | 1.44                     | 0.0758               |
| &Е    |    |        |       |                          |                      |
| 25-27 | 12 | 8.96   | 3.04  | 9.2416                   | 1.1552               |
| &Е    |    |        |       |                          |                      |
| 28-30 | 4  | 8.32   | -4.32 | 18.6624                  | 2.3328               |
| &Е    |    |        |       |                          |                      |
| 31-33 | 5  | 8.64   | -3.64 | 13.2496                  | 1.6562               |
| &Е    |    |        |       |                          |                      |
| 19-21 | 19 | 18.29  | 1.71  | 2.9241                   | 0.1628               |
| &1W   |    |        |       |                          |                      |
| 22-24 | 26 | 19.22  | 6.78  | 45.9684                  | 2.4194               |
| &1W   |    |        |       |                          |                      |
| 25-27 | 8  | 8.68   | -0.68 | 0.4624                   | 0.0578               |
| &1W   |    |        |       |                          |                      |
| 28-30 | 9  | 8.06   | 1.94  | 3.7636                   | 0.4705               |
| &1W   |    |        |       |                          |                      |
| 31-33 | 0  | 0      | 0     | 0                        | 0                    |
| &1W   |    |        |       |                          |                      |
| 19-21 | 12 | 10.915 | 1.085 | 1.1773                   | 0.1177               |

| &1PS          |    |       |        |         |         |
|---------------|----|-------|--------|---------|---------|
| 22-24         | 14 | 11.1  | 2.9    | 8.41    | 0.7645  |
| &1PS          |    |       |        |         |         |
| 25-27         | 1  | 5.18  | -4.18  | 17.4724 | 3.4945  |
| &1PS          |    |       |        |         |         |
| 28-30         | 8  | 4.81  | 3.19   | 10.1761 | 2.5441  |
| &1PS          |    |       |        |         |         |
| 31-33         | 2  | 4.995 | -2.995 | 8.9701  | 2.2425  |
| &1PS          |    |       |        |         |         |
| 19-21         | 0  | 0     | 0      | 0       | 0       |
| &2W           |    |       |        |         |         |
| 22-24         | 1  | 4.2   | -3.2   | 10.24   | 2.56    |
| &2W           |    |       | • • •  |         |         |
| 25-27         | 3  | 1.96  | 2.04   | 4.1616  | 2.1903  |
| &2W           |    | 1.00  | 1.10   | 1 202 1 |         |
| 28-30         | 2  | 1.82  | 1.18   | 1.3924  | 0.7735  |
| &2W           | 0  | 1.00  | 7 1 1  | 50 5521 | 20.0045 |
| 31-33<br>9 OW | 8  | 1.89  | /.11   | 50.5521 | 28.0845 |
| &2W           | 2  | C 705 | 2 705  | 14 2262 | 2 2977  |
| 19-21<br>& 1M | 3  | 0./85 | -3./85 | 14.3202 | 2.3877  |
| 22.24         | 1  | 6.0   | 5.0    | 3/ 81   | 5 8017  |
| 22-24<br>& 1M | 1  | 0.9   | -3.9   | 54.01   | 5.8017  |
| 25_27         | 4  | 3 22  | 1 78   | 3 1654  | 1.0562  |
| &1M           | -  | 5.22  | 1.70   | 5.1054  | 1.0502  |
| 28-30         | 3  | 2 99  | 1.01   | 1 0201  | 0.5102  |
| & 1M          | 5  | 2.77  | 1.01   | 1.0201  | 0.5102  |
| 31-33         | 12 | 3.105 | 8.895  | 79.1211 | 26.3737 |
| &1M           |    |       | 2.070  |         |         |
| -             |    |       |        |         | 89.3084 |

## Chi-Square Test

| Age   | Valu                        | e df   | Significant Value | р       |
|-------|-----------------------------|--------|-------------------|---------|
| 19-21 | X <sup>2</sup> 4.74<br>N 59 | 87 16  | 0.05              | .996868 |
| 22-24 | X <sup>2</sup> 11.6<br>N 60 | 214 16 | 0.05              | .769632 |
| 25-27 | X <sup>2</sup> 7.95<br>N 28 | 4 16   | 0.05              | .950224 |
| 28-30 | X <sup>2</sup> 6.63<br>N 26 | 11 16  | 0.05              | .979734 |
| 31-33 | X <sup>2</sup> 58.3         | 532 16 | 0.05              | <.00001 |

Table 6 explores the relationship between age group and it's duration in the library. In the table given, the highest chisquare value observe is 58.3532, indicating a valuable association between age group and it's duration in the library. Also, the age group that has the highest chi-square value observe is the age 31-33, which indicates that there are good relationship between age group and it's duration in the library. According to the study entitled "*Reading Relay League* (*RRL*): Engaging Different Age Groups in Library Exploration", offering a variety of reading challenges and activities tailored to different age groups, the Reading Relay League provides an inclusive and engaging environment within the library. This program encourages participants to explore diverse literature, fosters a love for reading, and connects like-minded individuals in a shared pursuit of knowledge and imagination. Also according to this study, the library is not just a place to borrow books but can also serve as a community hub and a center for fostering a love for reading and learning. To encourage individuals of different age groups to explore the library, we propose a new initiative called "Reading Relay League" (RRL).

## 4.CONCLUSION

This study shown that library services are effective and useful in the learning of college students at Northwestern Agusan Colleges, thus, the following points emerged from the present study.

- 1. There is a strong relationship between the course and satisfaction rating of library services.
- 2. There is a significant relationship between sex and it's duration in the library.
- 3. Male participants has the highest chi-square value observe in the relationship of it's duration in the library.
- 4. There is a strong relationship between age group and it's duration in the library.
- 5. The age 31-33 has the highest chi-square value observe in the relationship of it's duration in the library.

## 5. RECOMMENDATIONS

With the data gathered and discussed, the researchers recommends the following:

Schools must create an activity that will support to the library services and usage.

Schools must create a clubs that will support library.

Schools must priorities the library, so that everyone (students) will priorities it as well.

Schools must emphasize the space for library so that a lot of students can enter inside the library.

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