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### Perceived Sense of Belonging in Classroom and Academic Performance of Grade 12 HUMSS Students in a Public School

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#### Abstract

This study investigated the relationship between sense of belonging in the classroom and perceived academic performance among Grade 12 Humanities and Social Sciences students in Bacolod City National High School. The study employed a descriptive-correlational design with a sample of 240 students. Data were collected using standardized questionnaires measuring sense of belonging and perceived academic performance. Results revealed that the students possessed an average level of sense of belonging, with no significant difference observed between

male and female students. Similarly, students perceived their academic performance as average. Furthermore, no significant relationship was found between sense of belonging and perceived academic performance. These findings suggest that while fostering a sense of belonging is crucial, other factors may play a more prominent role in influencing academic performance among HUMSS students. Further research is recommended to explore additional variables and their impact on academic outcomes in this specific student population.

**Keywords:** Sense of Belonging, High School, Humss, Academic Performance

#### Introduction

##### Background of the Study

In the school community, the sense of belonging not only shields students from developing mental health problems but also enhances their motivation for schoolwork, with these benefits carrying forward into adulthood (Allen, 2022) <sup>[2]</sup>. Students who reported a strong sense of school belonging demonstrated improved academic functioning, including higher academic achievement, motivation, efficacy, and lower absenteeism (Korpershoek, 2019) <sup>[13]</sup>. However, the measures taken to prevent COVID-19 have had a noticeable impact on the daily habits of students, consequently affecting the shaping of their identities and sense of belonging. (Da Silva, 2021) <sup>[7]</sup>. A strong sense of belonging in school protects students from mental health issues, boosts academic motivation, and benefits them long-term, but COVID-19 measures have disrupted these benefits by impacting daily routines and identity formation.

A study by Kalkan and Dagli (2021) <sup>[11]</sup> found that school climate and school belonging are significant predictors of school burnout. This sense of belonging can also mediate the negative impact of school bullying on academic performance (Huang, 2020) <sup>[10]</sup>. There are also noteworthy studies that differentiate the sense of belonging of males and females. According to the study of Cwik and Singh (2022) <sup>[6]</sup>, women had a lower sense of belonging and grade than men in an introductory physics course for bioscience majors. Meanwhile, the study of Li and Singh (2023) <sup>[14]</sup> found that female students' sense of belonging was lower compared to male students in a physics course in a large public university in the United States.

Previous studies have also shown that Asian immigrant students in American schools tend to feel a sense of belonging with their school through communities of their migrants with the same nationality (Sung & Gounko, 2023; Reano, 2020) <sup>[20, 18]</sup>. Moreover, school-level variables including sense of fairness and teacher-student relations could explain the variance in school belonging (Ahmadi *et al.*, 2020) <sup>[11]</sup>. Moran-Soto *et al.*, (2022) <sup>[15]</sup> emphasize that the lack of developed relationships between students and their peers and teachers could result in a poor sense of belonging in school.

In the Philippines, students' sense of belonging at school was shown to have declined in the 2022 Programme for International Student Assessment (PISA) results, compared to the 2018 results. Though higher than the OECD average of 76%, 84% of the students felt that they belong at school, which is lower compared to the 95% in 2018. PISA is a triennial survey of 15-year-old

students around the world that assesses the extent to which they have acquired the key knowledge and skills essential for full participation in society. This poor sense of belonging of the students may contribute to the gradual deterioration of the quality of learning and learning development, particularly in public schools (Korpershoek, 2019; Galang, 2019)<sup>[13, 9]</sup>.

The studies previously mentioned were mostly conducted in higher education institutions. The studies that showed the difference in male and female sense of belonging were also conducted at universities and only measured their sense of belonging in a physics class. PISA being the lone data of sense of belonging indicates that there is a lack of studies on the sense of belonging of students in the Philippines. Additionally, PISA has yet to conduct a student assessment in Bacolod City National High School. In this regard, this study aimed to explore the sense of belonging of BCNHS Grade 12 HUMSS Students and its correlation with their academic performance.

### Statement of the Problem

Generally, this study aimed to investigate the relationship between the sense of belonging inside the classroom and the academic performance of Grade 12 HUMSS Students of Bacolod City National High School.

Specifically, this study aimed to answer the following questions:

1. What is the perceived sense of belonging in the classroom of Grade 12 HUMSS students when grouped according to sex?
2. What is the perceived academic performance of Grade 12 HUMSS students?
3. Is there a significant relationship between sense of belonging in the classroom and academic performance of Grade 12 HUMSS students?

### Materials and Methods

#### Respondents of the Study

The target population of this study are the Grade 12 Students from the 11 sections of the HUMSS strand of Bacolod City National High School. The sample size is further determined from the 605 enrolled Grade 12 HUMSS Students in the Second Semester of S.Y. 2023-2024. Using Slovin's formula, the researchers yielded a sample size of 240. Slovin's formula calculates the number of samples required when the population is too large to directly sample every member (Ellen, 2020)<sup>[8]</sup>.

A stratified sampling technique was used to determine the student respondents in every section. According to Thomas (2020)<sup>[21]</sup>, Stratified Sampling Techniques are employed to divide a population into homogeneous subpopulations based on specific attributes (e.g., race, gender identity, location, etc.). Table 1 presents the population of each section in the HUMSS strand and the sample size per stratum.

**Table 1:** Population and Sample Size of each Grade 12 HUMSS Sections of BCNHS

| Section   | Population | Sample |
|-----------|------------|--------|
| Andersen  | 57         | 23     |
| Blake     | 57         | 23     |
| Chaucer   | 56         | 22     |
| Dickinson | 38         | 15     |
| Emerson   | 56         | 22     |
| Frost     | 57         | 23     |
| Golding   | 55         | 22     |
| Irving    | 58         | 23     |
| Joyce     | 55         | 22     |
| Lewis     | 51         | 20     |
| Marlowe   | 59         | 24     |
| Total     | 605        | 240    |

### Research Instrument

This study measures the students' sense of belonging in the classroom using the 5-point Likert scale, Revised Sense of Belonging Scale by Hoffmann *et al.*, (2003). The scale consists of 26 items, divided into 4 factors: Perceived Peer Support (8 items); Perceived Classroom Comfort (4 items); Perceived Isolation (4 items); and Perceived Faculty Support (10 items), with responses ranging from 1 (Completely Untrue) to 5 (Completely True).

The respondents' academic performance was measured using the Perceived Academic Performance Scale of Verner-Filion and Vallerand (2016)<sup>[22]</sup>. The scale contains 5 items, each on a 7-point scale from 1 (Do not agree at all) to 7 (Very strongly agree).

### Data Gathering Procedure

The researchers practiced proper research guidelines. Before conducting the actual survey, the researchers tested the validity and reliability of the instruments and sent out informed consents to whom will be involved in the study.

The researchers asked for the class list of each 12 HUMSS sections and sampling technique was applied to obtain sample size in each stratum. After obtaining the sample size and random selection in each stratum, the researchers invited the chosen students through their class mayors and were given the consent forms. The researchers allowed those who opt out of the survey and asked another student to fill their place. The researchers gave out the printed survey questionnaires and were filled out within the same day of the distribution of questionnaires, with clear and simple instructions.

Due to time constraints and class suspensions, the researchers had to utilize Google Forms to collect data from the sections who were not able to answer the printed questionnaires. The links of the Google Forms were given to

certain sections through their class mayors. Afterwhich, survey questionnaires were collected through each class mayor to ensure an organized collection of papers. The researchers analyzed the data from the questionnaires and used the proper statistical treatments.

**Data Analysis**

Parametric tests will be used when a normal distribution is assumed (Savani & Barrett, 2009) [19]. Otherwise, nonparametric tests are used in cases where parametric tests are not appropriate (Chin & Lee, 2008) [4].

To answer question 1 and 2, the results of the mean and standard deviation of the variables were utilized.

The tables below show the rating scale for interpreting the mean score of data for sense of belonging and academic performance.

**Table 2:** Mean Interpretation for the Perceived Sense of Belonging

| Mean         | Interpretation |
|--------------|----------------|
| 4.21 to 5.00 | Very High      |
| 3.41 to 4.20 | High           |
| 2.61 to 3.40 | Average        |
| 1.81 to 2.60 | Low            |
| 1.00 to 1.80 | Very Low       |

**Table 3:** Mean Interpretation for the Perceived Academic Performance

| Mean         | Interpretation               |
|--------------|------------------------------|
| 6.16 to 7.00 | Extremely High               |
| 5.30 to 6.15 | High                         |
| 4.44 to 5.29 | Slightly Higher than Average |
| 3.58 to 4.43 | Average                      |
| 2.72 to 3.57 | Slightly Lower than Average  |
| 1.86 to 2.71 | Low                          |
| 1.00 to 1.85 | Extremely Low                |

For question 3, which aims to determine if there is a significant relationship between sense of belonging in the classroom and academic performance of Grade 12 HUMSS Students, Pearson r was employed.

**Results and Discussion**

**Results**

Table 4 shows the perceived sense of belonging in the classroom of Grade 12 HUMSS students in Bacolod City National High School when grouped according to sex.

**Table 4:** Perceived Sense of Belonging of Grade 12 HUMSS Students in BCNHS when grouped according to sex

| Factors                     | Female |      |      | Male           |     |      |      |                |
|-----------------------------|--------|------|------|----------------|-----|------|------|----------------|
|                             | n      | M    | SD   | Interpretation | n   | M    | SD   | Interpretation |
| Perceived Peer Support      |        | 3.26 | 0.88 | Average        |     | 3.10 | 0.83 | Average        |
| Perceived Classroom Comfort | 133    | 3.11 | 0.99 | Average        | 107 | 3.18 | 0.95 | Average        |
| Perceived Isolation         |        | 2.71 | 0.87 | Average        |     | 2.68 | 0.84 | Average        |
| Perceived Faculty Support   |        | 2.71 | 0.72 | Average        |     | 2.90 | 0.77 | Average        |

Results have shown that grade 12 students under the HUMSS strand have the same level of sense of belonging even when grouped according to sex. A weighted mean of 2.94 has been found on the sense of belonging of female while a mean of 2.96 for male, which both interpret to average. These results support the null hypothesis that there is no significant difference in the sense of belonging of Grade 12 HUMSS students when grouped according to sex.

These results are yet to be supported by other studies as prior research indicated results wherein females had lower sense of belonging than males (Cwik and Singh, 2022; Li and Singh, 2023) [6, 14]. In contrast, Kissinger et. al., (2009) [12] study on the role of gender in belonging and sense of community of engineering students showed results that female engineering students from electrical engineering (EE), civil & environmental engineering (CEE) and combined computer science/electrical engineering (CS/EE) student populations that persist to the junior/senior level show an increased sense of belonging when compared with male students at the same academic level.

Table 5 presents the perceived academic performance of Grade 12 HUMSS students in Bacolod City National High School.

**Table 5:** Perceived Academic Performance of Grade 12 HUMSS Students in BCNHS

|                                | n   | Mean | Std. Deviation | Interpretation |
|--------------------------------|-----|------|----------------|----------------|
| Perceived Academic Performance | 240 | 4.39 | 0.263          | Average        |

The presented results above indicate that Grade 12 students under the HUMSS strand of BCNHS perceive their academic performance as average. With a weighted mean of 4.39 (SD=0.236), the results are interpreted as average. This data entails that the null hypothesis is rejected.

Data in Table 6 shows the significant relationship of the perceived sense of belonging in the classroom and perceived academic performance of Grade 12 HUMSS students in Bacolod City National High School.

**Table 6:** Relationship between the Perceived Sense of Belonging in Classroom and Perceived Academic Performance of Grade 12 HUMSS Students in BCNHS

| Pearson Correlation | Sig. (2-tailed) | Interpretation  |
|---------------------|-----------------|-----------------|
| 1                   | 0.000           | Not Significant |

The table above shows that there is no significant relationship between perceived sense of belonging in the classroom and perceived academic performance of Grade 12 HUMSS students of Bacolod City National High School. The Pearson Correlation and Sig values (PC=1, Sig.= 0.000) shows that the null hypothesis is accepted as there is no significant relationship between the perceived sense of belonging in the classroom and perceived academic performance of Grade 12 HUMSS students. These results are similar to Carrie (2020) study on the academic achievement and sense of belonging of university athletes. The results showed a non-significant relationship between the sense of belonging and academic achievement of the student athletes.

**Conclusion Summary**

In summary, a total of 133 females and 107 males, with a total of 240 students participated in this research creating a 100% participation from the target respondents. Both sexes showed an average level of sense of belonging with a mean of 2.94 for female and 2.96 for male. Grade 12 HUMSS students display an average level of sense of belonging, with no significant difference between female and male students. With regards to the academic performance of the students, results revealed a mean of 4.39 which indicate that Grade 12

HUMSS students perceive their academic performance as average. Lastly, there is no significant relationship between perceived sense of belonging in the classroom and perceived academic performance of Grade 12 HUMSS students of Bacolod City National High School.

### Conclusion

The findings of this study provide interesting insights into the sense of belonging and academic performance of Grade 12 HUMSS students at Bacolod City National High School. Contrary to prior research, the results show that there is no significant difference in the perceived sense of belonging between male and female students. This suggests that the school environment may be fostering an equitable sense of belonging for students regardless of gender.

The data also indicates that the academic performance of these Grade 12 HUMSS students is perceived to be average overall. This aligns with the finding of no significant differences in sense of belonging, as a strong sense of belonging has been linked to improved academic outcomes in prior studies. However, the lack of a significant relationship between sense of belonging and academic performance in this case may need further investigation.

Overall, these results show a new perspective of the factors influencing the experiences of Grade 12 HUMSS students inside the school. While gender does not appear to be a differentiating factor in their sense of belonging, the relationship between belonging and performance remains unclear. Additional research is needed to fully understand how these variables interact in this context. Nonetheless, the findings provide a useful baseline for understanding the experiences of Grade 12 HUMSS students in Bacolod City National High School.

### Limitations of Findings

This study was only limited to the Grade 12 students under the HUMSS strand of Bacolod City National High School and did not extend to other strands and tracks, which limits the generalizability of the results. The study also utilized both online and printed survey questionnaires which could have excluded those without internet access or familiarity with print surveys. Acknowledging these limitations is important in interpreting our results accurately.

### Recommendations

#### Practical Application

From the results presented above, the researchers would like to recommend the implementation of activities where students can come and work together and create an output that would express their own ideas. This includes an activity where each class mayor from every section would team up and plan for a program that will develop the confidence of students in engaging in group discussions and performances. A competition for a mural painting or landscape gardening between each section which will be led by the HUMSS club can be a great activity for the students to express their own ideas and creativity, this program would also contribute to the beautification of the school.

The researchers also encourage the school administration to create a policy where students are given equal exposure to academic or non-academic activities inside and outside of school. The researchers suggest a policy which prohibits students from taking on a number of responsibilities, and would limit each student to only one position in school

organizations. Through this, each student can focus on one responsibility and organizations can generate a better performance.

### Direction of Future Research

Given the findings from this study, future research could explore several directions to provide a more comprehensive understanding of the relationship between sense of belonging and academic performance among students.

Future researchers can extend the research to include students from different educational strands and tracks, as well as from other schools and regions, to determine if the findings are consistent across a more diverse population. Researchers can also conduct qualitative research studies to create an in-depth understanding of the sense of belonging of the students.

As the study utilized a scale to investigate the academic performance of the students, future researchers are highly encouraged to use the General Weighted Average (GWA) of students to have accurate findings for the academic performance. Other investigators can also use pretest-posttest methods in determining the academic performance of the students.

Teacher researchers can also conduct longitudinal studies to track the changes in sense of belonging and academic performance over time, which would explore the different learning environments in each school year and would also help in understanding the causal relationship between these variables.

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