GAS	0%	0%

Table 3 presents the result of ANOVA for the STEM strand. With a p-value of 0.000 for students with right hand preference, the result is seen as highly significant as it is ≤ 0.05. This result suggested that the theory of brain lateralization was proven. In the theory, those who have right handedness often have dominant left-brain side which characteristics involved having analytical and mathematical skillset. The skillset that the students have is seen appropriate for their chosen program.

Table 3. ANOVA Result for STEM Strand – Right-Hand Preference

Source	df	Adj SS	Adj MS	F-Value	P-Value
Factor	1	8558	8557.8	63.35	0.000
Error	152	19314	127.1		
Total	153	27872			

Table 4. ANOVA Result for STEM Strand – Left- Hand Preference

Source	df	Adj SS	Adj MS	F-Value	P-Value
Factor	1	8558	46.29	0.46	0.506
Error	26	19314	101.58		
Total	27	27872			

The p-value of 0.506 in Table 4 referring to those with left-hand preference suggests that there is no significant relationship between the variables; thus, accepting the null hypothesis. Students that have left handedness would significantly have dominant right side of the brain which is contradictory to what skillset their chosen track offers. The high p-value suggests that the students in STEM with left handedness fall on the grounds of a sample size that have equivalent mean, this suggests that the right brain dominant and the left-brain dominant STEM students have no statistical relationship, and the results are highly different without either dominant brain side standing out. This may be because of the contradictions of those left-handed with also a left-brain side, that have skillset relative to STEM strand.

For the ABM strand shown in Table 5, the right handedness for left hemisphere against the right hemisphere resulted into a p-value of 0.001 which is less than 0.05, meaning that the results obtained prove significance on the theory of brain lateralization that a person's brain dominance is lateral to his hand preference. Thus, rejecting the null hypothesis. In addition, their brain lateralization might affect to boost students' performance on their strand. ABM strand is inclined to numerical solutions and computations and is fit for financial computation and marketing strategies. It is seen to be appropriate to the respective academic track and suggests that the skillset is matched. Thus, the theory is again proven to be correct.

Table 5. ANOVA Result for ABM Strand – Right-Hand Preference

Source	df	Adj SS	Adj MS	F-Value	P-Value
Factor	1	1445	1445.0	10.93	0.001
Error	72	9520	132.2		
Total	73	10965			

For ABM students with left hand preference, comparing the left and right hemisphere resulted to a p-value of 0.602. This means that the results obtained prove insignificance to the theory of brain lateralization. On contrary, these students are seen to be unfit to their respective academic track and suggests that their skillset is mismatched. Since they are left-handed, they are probably more creative and imaginative and therefore should pursue careers in other fields and not in ABM.

Table 6. ANOVA Result for ABM Strand – Left- Hand Preference

Source	df	Adj SS	Adj MS	F-Value	P-Value
Factor	1	62.50	62.5	0.29	0.602
Error	8	1702.00	212.75		
Total	9	1764.5			

The results for HUMSS students for right hand preference has a p-value of 0.192, as presented in in Table 7. This suggests that there is no significant difference between the two variables. In this group, their skillset or character involving the left side of the brain is seen as contradicting to their chosen academic track. The high p-value suggests that the connection between the means of the given data have no relationship to one another.

Table 7. ANOVA Result for HUMSS Strand – Right-Hand Preference

Source	df	Adj SS	Adj MS	F-Value	P-Value
Factor	1	207.0	207.0	1.77	0.192
Error	38	4451.9	117.2		
Total	39	4658.9			

Consequently, responses of left-handed students yielded a p-value is 0.006 which is less than the significance level of 0.05. The result shows high significant difference between the two means. Left-handed people tend to be more creative or artistic therefore majority of them are right-brained. As explained, HUMSS is an academic track that focuses on logic, language, and critical thinking of the students. It shows that the theory proves that majority of the HUMSS students are on the right academic track since they chose the program that is related to their skillset.

Table 8. ANOVA Result for HUMSS Strand – Left- Hand Preference

Source	df	Adj SS	Adj MS	F-Value	P-Value
Factor	1	420.1	420.1	12.25496	0.006
Error	10	342.8	34.28		
Total	11	762.9			

Finally, for GAS, the p-value of 0.766 was computed for students who are right-handed, and no student preferred to be left-handed. Students who are enrolled in this track are still undecided to which career they would like to pursue. In summary, a high p-value for this group suggests uncertainty in students' characteristics.

Table 9. ANOVA Result for GAS Strand – Right-Hand Preference

Source	df	Adj SS	Adj MS	F-Value	P-Value
Factor	1	7.042	7.042	0.09	0.766
Error	22	1700.92	77.314		
Total	23	1707.96			

The result can help students enhance their skillset and take up courses that would eventually fall on what dominant brain side they have. Numerous electives from the other strands are offered to the students of this strand to further enhance their abilities and help them decide which career path they should follow. The theory can serve as a guide in finding the suited profession that matches their mindset and that can complement the skills they acquire.

5. Conclusion

The theory stating that individuals may be left-brained or right-brained means that people in general have specific skillset unique to the activities of the brain. The working theory of Split- Brain Experiment of Sperry suggested that the brain dominance of a person is lateral to his hand preference. Following this theory, this study centered on the

comparison of academic skills of students enrolled in the various academic strands in Senior High School education in the Philippines. Examination results of selected group of students revealed how majority appropriately selected the specific track they are in where 84.42% with right hand preference and 42.86% with left hand preference for STEM students and 78.38% and 40% of the right and left handed, respectively, for ABM students demonstrated dominance of the brains' left hemisphere, a character appropriate for those who are analytical logical, and critical thinkers. On the other hand, 65% of the right-handed and 100% of the left-handed students in HUMSS track exhibited dominance of the right side of the brain, suitable for careers in journalism, communication arts, liberal arts, education, and other social science-related profession of students who are artistic, creative, and imaginative. Finally, students enrolled in the GAS strand, who are all right-handed, displayed contrasting characters since half of them have dominant right side and another half with dominant left side. This suggests that students in this group may take careers either in engineering, technology, journalism or social science profession in the future.

Future researchers may explore on correlating the dominant brain side to the academic scores or grades of students to create a profile on which field their motor skills are mostly accustomed to, and for these students to fully develop their expertise. Using the academic scores or grades, researchers can create a comparison on the connection of their dominant hemisphere to their grades in different courses that varies among skillsets from both brain side. Another subject to consider is involving the junior high level for them to know which of the senior high academic track best suited their abilities and character. Exploring these studies can help students assert their personal traits and relate those to their academic skillset which would be beneficial in continuing a path or career suitable for them may it be in the fields of engineering, medicine, and architecture, or the shift to the aesthetics of creative arts and literature.

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