

## SPECIALITY OF LEFT HANDED ON INTELLIGENCE LEVEL OF STUDENTS

Suhana Saari  
*Faculty of Information Management,  
Universiti Teknologi MARA (UiTM)  
Puncak Perdana Campus,  
UiTM Selangor, Malaysia*

### Abstract

The focus of the study is to examine the relationship between left-handedness and increased intelligence among students in faculty information management, Uitm Puncak Perdana. The aim of this research is to investigate the specialties and the abilities of left handed students in their studies performance compared to the right handed since left handers is in the minority in all human population.

**Keywords:** left handed, level of intelligence, students, specialties.

### INTRODUCTION

Left-handedness is the preference for left handed people in doing daily activities like writing and throwing. Besides that, it is incredible about 8-15% only people who are left handed. In this world there have four types of handedness which is left-handedness, right-handedness, mixed-handedness, and ambidexterity. Left-handedness is less common than right-handedness. Left-handed people are more talented with their left hands when performing tasks and right-handedness is more skillful with their right handed but lack of using left handed hand. While ambidexterity people can used both of their hand and this is really special and this group of people have more advantages than people who only can used their right and left hand only. From the studies there only 10% people who are left handed of the world population. Left handed is really special because they have their own day August 13<sup>th</sup> is known as left-handers day. Left-handers day is launch in 1996, this yearly event is celebrate left handed people and to conduct awareness about the difficulties faced by left handed people experience every day in a world design for right handed.

Left handed or dexterity is from Latin word ("dextra", meaning right) which is mean right show inherently valuable and very different than being left-handed or bad (Latin "sinistra", left). Left-handedness inclination to use their left handed better than right handed. Someone can be regarded as left-handed users when they are achieve the good result with their left handed and when he gave priority to his left hand when doing activities that require strength and accuracy (Meyer,1998). As is well known generally people used their right handed compared to the left handed is relatively small about 10-15% only. Interestingly the rate of left handed individual are not changed since Paleolithic age.

According to (Rice,1998) state that handedness is natural or biological to used one hand or more in doing the special or important task and it is depending on which hemisphere is dominant for the task. Besides that, studies suggest that left handed people are more talented in math and architecture. While right handed are tend to be more talented in verbally this is because the connection between right and left both the brain faster for the left handed. This is mean the information transfer are more fast, and make left handed people become more efficiently. Moreover, some studies found that left handed people able to do multitask, lefties person may find it is easy to multi-task and deal with large matter. Besides that researcher found that conversation between left and right brain happened faster compares to the right handed. the more powerful the left handed is, the better these abilities are. According to Chris McManus which is the Professor of psychology and medical education at University College London,told Scientific American he state that the brain of left handed can proses the language, spatial relations, and emotion in a creative ways. The reason why left handed people get a high percentage in a music field and mathematics compared to the right handed.

## **ISSUES**

In this paper, we identify several issues regarding to left handed students regarding their life performances. Based on my observation from the previous study, there are still some limitations and bias issues about left handed people according to their natural advantages. Some of the limitations are:

1. Many common tools are designed solely for use by right-handed people, making them difficult, painful, or unsafe for left-handed people to use.
2. Commonly examination desk are design for right handers so it is being difficult for left handers students to use it.
3. Input devices for computers can present obstacles to left-handed operation if intended for right handed use for example the common tool of device which is mouse.
4. In the societies left handers are considered unlucky or even malicious by the right-handed majority.
5. Many languages refers left handed as awkwardness, dishonesty, stupidity, or other undesirable qualities.

## **RESEARCH QUESTIONS**

In this paper we analyze several research questions regarding to our topic. The research question is:

- How handedness can effect to level of intelligence?

- What are the advantages of being left handed students compared to the right handed students?
- It is possible for left handed to achieve success more than right handed students?
- How do left handed uses their natural abilities to improve their studies?

## RESEARCH OBJECTIVES

The aim of this paper is to evaluate the level of intelligence among left handed students. In order to achieve this aim, we identify the sub-goals:

- To explore the specialty of being left handed among students.
- To determine if left handed interfering with students' academic performance
- To identify the natural abilities of left handed.
- To investigated the relationship between handedness and level of intelligence.

## LITERATURE REVIEW AND PROPOSED FRAMEWORK

Based on future data collections, we can determine the expected outcome it would be. Each method will explain in different outcome based on the result of questionnaire. I will use questionnaire as the first method to get the better result. The target audience for my questionnaire is left handed students in faculty information management, Uitm Puncak Perdana. The purpose of the questionnaire was to determine the advantages possess by left handed student in their subject field. Moreover the purpose of this questionnaire to know the superiority owned by left handed student which cannot be done by right hand students.

Based from the article relationship between left-handedness and increased intelligence among university undergraduates find out that left handers people are more talented in the area of spatial and musical more than right handed people. Moreover the study opined that left handers can do well in the area of spatial and in a musical intelligence field. Besides that left handers also have an advantages which is if they can use their advantages really well they can improve their memory because the used of both of the brain. According to (McManus, 2002) left handers people have more power of perception compared to right handers people. (McManus, 1997) also said the past research increase number ratio of left handers they can produce a corresponding scholar advances and leap in the number of mathematical sporting or artistic geniuses. Based on Annett and (Marian, 1993) which is the studies was done on Annett's theory state that left handers is preserved by by a balanced polymorphism and left-handers are intellectually more advantaged (Ghayas & Adil, 2007).

Previous article which is relationship between left-handedness and increased intelligence among university undergraduates, (Rice, 1998) has stated that left handers

are well known among professional baseball and cricket players. In addition the next articles also support left handers people are common in the sports field. According to this article left handedness people is known to give an advantages in a top level that involved interactive contest. Besides that, most of renowned leader on this world are known as a left handers, it has been shown left handers people can be a leader. Moreover in this article also state even in the sport area, left handed athletes like Babe Ruth (baseball), Tim Tebow (football) and Clive Lloyd (cricket) is known as a great motivator in a sports field. In the articles *The Prevalence of Left-Handedness among Medical and Dental Students in the University of Lagos-Nigeria* also mention about left-handedness frequencies in interactive sports (such as fencing, boxing, tennis, baseball, cricket) to appear is very high. In this articles also state that left handed people are seen to be more creative and they can see the whole of the picture and they also have a high perception compared to the right handed people (Ademola et al., 2011).

In the next article also support that left handed people are talented in sports field which is (Faurie and Raymond, 2004; Faurie et al, 2005) state interactive sports are bring advantages in a western society and the result of students participants is higher. There has an opinion that left handers are more excellence than right handers because their natural abilities exist in them (Hengemeh & Angaji, 2010). In the article effects of handedness on the hand grip strength asymmetry in Turkish athletes find out the ratio of left handed player are more higher in a trained athletes and elite athletes in a variety of sports. In this article also support with the statement ( Brooks, Bussi re, Jennions, & Hunt, 2004 ) almost 50% of the most effective 2003 cricket World Cup athletes were left-handed (Ziyagil et al., 2015). According to (Geschwind dan Galaburda, 1987) left handed people are generally believed possess better on overall (Breznik, 2013). Besides that on this article state actually when we look at the interactive sports we can see left handed athlete are over represented compared to the general population. According to (Heilman & Van Den Abell, 1980) left handers/footer have generally more excellence compared to the right handers this is because the due to better neuro psychological predispositions. Discussion in the next article about the advantages of left handers in physical fights is really recommended by both of the study of interactive sports in industrialized societies and a cross-cultural differentiation of traditional societies. Besides that, left handed may have others selective advantages (Alibeik, 2011).

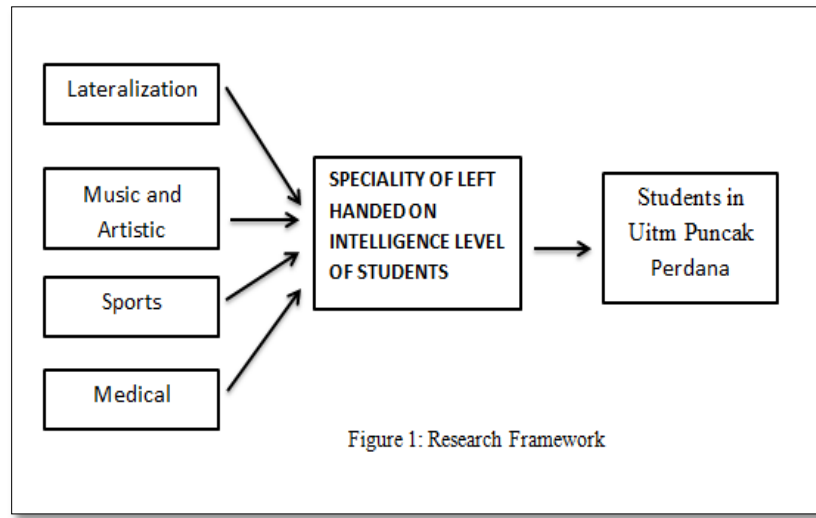


Figure 1. Research Framework.

Based on figure 1, there have many article related with specialty of left handed on intelligence level of students there are divided by lateralization, music and artistic, sports and medical. This study has found in the context of lateralization there is no strong evidence to show that those who use the left hand having an effect on lateralization. Through the study people of using the right hand and the left have the same advantages in lateralization. Although in this study stated that people using the left hand are more effective, but after a review of several articles cannot prove by clear and authentic that one's left hand have an specialties on this context which is mean both of the group are has the same advantages. However, in the previous studies there have few researcher found that left handed people have natural abilities and they can react fast than right handed people, just they do not have a deeper research about this matter to prove as an evidence. The finding show that left handed people are really has an advantage on the music and artistic field, according from the literature review there have so many articles has been said that left handed people are individual who can do well in the areas of spatial and musical intelligence, from the finding also has revealed that left handed people are more talented rather than right handed in the music and artistic field. In the context of music and artistic also find out that left handers can produce a corresponding intellectual advances and leap in the number of mathematical sports or artistic geniuses. The findings showed that left handed people also talented in sports area and this is has been support by many articles during the literature review. This study has found that many left handed people are active in sport fields and mostly they are greater. people. This study also found that ratio of left-handers also showed higher in coach and elite athletes in different sports which mean left handed people are active in sports. The finding also revealed that almost 50% of the most successful 2003 cricket World Cup athletes were left-handed. The findings also shows left hand has

faster reaction time even among the right-handed people and better anticipation skills. It has shown that left handed people have capability on this field. This study also found that left handed peoples faced difficulties students while performing the clinical tasks that involve psychomotor skill. The study also revealed that there no special tools and apparatus for medical student for left handed medical students, besides that most of the surgical tools and apparatuses are designed for right handed medical personnel.

## CONCLUSION

In a conclusion, although the population of left-handed only 10% in the world's population, 20% of members who are members of MENSA (the group of smart people) is comes from left handed people. The advantages of left-handed people in manage and access information more quickly cannot be deny because there have many research found out that left handed people have the natural abilities on it because they can use both sides of the brain to access information. Moreover they also have natural talents and extraordinary abilities if they are given the same opportunity as the right hand. Although in the past there was discrimination against the left-handed but nowadays teachers and families can receive and understand even entire schools around the world now allow students to use for left-handed continuing to using their left hand to write.

## REFERENCES

- Adekoya, J. A., & Ogunola, A. A. (2015). Relationship between left-handedness and increased intelligence among university undergraduates. *Psychology and Behavioral Sciences*, 44-50.
- Alibeik, H., & Angaji, A. (2010). Evolutionary Back Grounds of Human Left Handedness. *Research Journal of Biological Sciences*, 36-41.
- Alibeik, H., Angaji, S. A., Pouriamanesh, S., & Movallali, G. (2011). The Correlation Between Left-sidedness and Intelligence as an Advantage for Persistence of Left-handed Frequency in Human Evolutionary Pathway. *Australian Journal of Basic and Applied Sciences*, 1517-1524
- Ademola, O., Kofoworola, O., Omotayo, O., Rosemary, B., Dolapo, D., & Edidiong, A. (2011). The Prevalence of Left-Handedness among Medical and Dental Students in the University of Lagos-Nigeria. *Middle-East Journal of Scientific Research*, 288-293.
- Ghayas, S., & Adil, A. (2007). Effect of Handedness on Intelligence Level of Students. *Journal of the Indian Academy of Applied Psychology*, 85-91

- Masud, Y., & Ajma, M. A. (2012). Left-handed People in a Right-handed World: A Phenomenological Study. *Pakistan Journal of Social and Clinical Psychology*, 49-60.
- Olson, S. (2013). *International Left-Handers Day: What Are The Benefits Of Being Left-Handed?* Retrieved at 2016, May 7 from <http://www.medicaldaily.com/international-left-handers-day-what-are-benefits-being-left-handed-251089>
- Ziyagi, M. A., Gürsoy, R., Dane, S., Türkmen, M., & Çeb, M. (2015). Effects of handedness on the hand grip strength asymmetry. *Comprehensive Psychology*, 20