



Lived Experiences of the Left-Handed: A Case of Solusi University, Zimbabwe

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Abstract: *This study purposed to explore the lived-experiences of students and workers at Solusi University, Zimbabwe. Questionnaires were administered amongst 24 participants to gather information, which was interpreted through structured and unstructured themes. The highlighted themes, which have implications on the public and private sectors, included heredity, strength in particular areas, discrimination and suppression as well as the impact of family, religion and culture. Key findings of this study revealed that there is still intolerance of the left-handers using the left-hand for chores, such as cooking, eating and writing. Another finding, which provided more questions than answers, was whether or not handedness is hereditary due to mixed results. In addition, this study found out that the left-handers faced equipment challenges at home and educational institutions. Another finding, which might need further investigation pertained the psychological effects of forced suppression of the use of the left-hand. Recommendations of this study include a need for the use of the international day of the left-handed for awareness and mobilization to support the left handed. In addition, national and institutional policy formulators and implementers should make deliberate efforts towards facilitating for user-friendly equipment and items for the left-handers.*

Key words: Left-handedness, Religion, Culture, Suppression

Introduction

The question of which hand to use for certain chores, such as cooking, eating, greeting, writing and determining a vote has been part of human society since time immemorial. Left with more questions than answers, it appears certain pockets of society have become more tolerant than others over a period of time, yet more still needs to be done. It is against this background that this study sought to establish some of the experiences of the left-handed students and workers at Solusi University in Zimbabwe. This study is essential in the understanding of the challenges faced by the left-handers as well as helpful to the organizations and professionals such as psychologists towards having an appreciation of this minority group.

A better understanding of such experiences is possible by looking at the general background to handedness. According to Masud and Ajmal (2012), right-handedness or dexterity, with the latter being derived from the Latin word 'dextra,' is an estimable

trait, which is very different from being left-handed or sinister, as derived from the Latin word 'sinistra.' In addition, the authors assert that, left-handedness is a tendency to use the left-hand more frequently as compared to the use of the right-hand. According to Meyer (1998), a person is considered to be left-handed when s/he attains better results through the use of the left hand as well as when s/he prefers to use the left hand in a number of activities which need strength, good co-ordination and accuracy. While the percentage of the right-handed and left-handed people in Zimbabwe and Africa remains unknown, the Western societies' estimates opine that about 90 per cent of the population are right-handed while the left-handers or the ambiguous occupy the remaining 10 per cent, without factoring in gender, age and cultural geographical locations (Alibeik, Angaji, Pouriamanesh & Movallali, 2011; McManus, 2002; Soper, Satz, Orsini, Henry, Zvi & Schulman, 1986).

Another factor to consider is whether or not, handedness could be influenced by heredity. Alibeik et al (2011) suggest that the offspring of two left-handed parents are likely to be left-handed while the same is for the right-handed offspring to two right-handed parents. According to Llaurens, Raymond and Faurie (2009), McManus (1991) and McKeever (2000), approximately 30 per cent to 40 per cent of children with both left-handed parents are likely to be left-handed. Heredity has been disputed by other authors such as Selim (2002) who gives examples of Queen Elizabeth II, Prince Charles and Prince William who despite being born in families where left-handedness is pronounced are right handed. The author adds that two-thirds of all lefties are born to right-handed couples (Ibid). Masud et al (2012) attribute handedness to heredity, environment and to the brain function. For centuries, there have been searches for answers as to why some people use the left-hand and why such are a minority (Franklin, 2008). While left-handers are found in all communities of the universe, the African context, more-so, the Zimbabwean context remains a virgin area, which has given impetus to this study. Otherwise, most of the experiences are largely a part of oral tradition.

Left-handedness, Religion and Culture

It appears that hand preference can also be determined by religion and culture or environment, and according to Masud et al (2012), the existing difference between right and left-handers in the different cultures and belief systems focus on the likelihood that being left-handed may be a sign or an indication of some pathology, problem or evil. This might also explain why several African cultures might preclude individuals from the use of the left-hand for eating, writing, greeting and other uses, especially from childhood (Alhassan, 2018). Laland, Kumm, Van Horn and Feldman (1995) presented the fact that most of the research that had been done on handedness then had not considered the influence of culture. At the same time, an attitude towards handedness also varies from one culture to the next (Harris, 1992; Bryden, Ardila & Ardila, 1993; Mandal, Ida, Harizuka & Upadhaya, 1999). According to Llaurens et al (2009), culture, which can be put together with religion, can force a left-hander into a right-hander but with the individual ending up using both hands, depending on the pressure of the activity or task to be accomplished. While actual statistics of left-handers remain capricious, Dellatolas, De Agostini, Jallon, Poncet,

Rey and Lellouch (1988) discovered that there was an increase of the use of the left-hand in the second half of the 20th century in France; the same was also observed in Italy (Salmaso & Longoni, 1985).

De Agostini, Khamis, Ahui and Dellatolas (1997) observed that, in Ivory Coast and Sudan, cultural pressure was still much pronounced against the use of the left-hand for eating purposes; the same can also be said of Japan, where cultural pressures could have restricted the use of the left-hand for eating and writing to only 0.7 per cent and 1.7 per cent, respectively (Llaurens et al, 2009). As a result, authors, such as Bryden et al (1993), have observed that hand use can be successfully modified through positive reinforcement at an early age for most of the activities or as preferred by the environment. The same has also been observed amongst those whose hand use could be affected by injury.

Crabtree (2016) argues that left-handedness has been associated with religious practices that involve magic in some African, Asian, Australasian, European and American communities. In addition, the author highlights how in such communities, the left-hand path would be associated with self-development, instead of communal concerns, self-analysis, at the expense of group meditation, self-empowerment for material reasons, rather than for spiritual ones. This means that left-handedness is associated with selfishness, personal abilities, free-thought and so-forth. The author further asserts that the left-hand path has been associated with Satanism and bad behavior. If the left-hand path has been associated with all that is negative, then the right-hand path has been associated with symbols of good deeds, the sun, submission to the gods and religious authority.

Christians and Islam institutions have been observed to ostracize left-handers, and in the worst scenarios, punish them. According to Crabtree (2016), Judaism and Christianity associated the right side with body representation of the first stage of creation, daytime, consciousness, Adam, Man and active power, while the left side has been associated with the second stage of creation, earth, matter, Eve and women; overall, the right represents solar, while the left, lunar. According to Shepherd et al, cited in Crabtree (2016), Catholic Schools, especially in Europe and the Americas, until recently, used to punish the use of the left-hand in writing, because they were presupposed to be agents of the devil and such children were "corrected," which merely

meant they were forced into using the right-hand. For over 1000 years, the Catholic Church held the belief that being left-handed made one a servant of the devil, while anything left-handed was perceived evil.

The Qur'an and the Christian bible would refer to the elect and God's favorite sitting on the right-hand side, and damned on the left (Crabtree, 2016). Accordingly, Matthew 25:33-46 (The Holy Bible, 1982) mentions of how, in the final judgement of the earth's history by Christ, the righteous would sit on His right side while the condemned on the left. In similar fashion, a picture of the last judgement shows Jesus on the right hand of God while Christ showed His disciples their new heavenly abode with His right hand and points with His left to hell (Ibid). To many, the left hand path, therefore, could be associated with being demonic, diabolical and as an earthly route to hell. Notable also, most of the votes in religious circles, such as churches, would request the members to vote for or against a proposal by use of the right-hand. Crabtree (2016) asserts that the Muslim forbid the touching of any scripture associated with holiness with the left-hand. Amongst the Muslims, while the right-hand is used for eating, the left-hand is used for sanitary habits of the primitive man; hence it is used to clean after defecation (Masud et al, 2012).

Confusion on handedness though, could emanate from the fact that scripture does not necessarily take an absolute position to condemn the use of the left-hand. Yet in other circumstances, left-handedness suggest otherwise, such as found in the biblical book of Judges 20:16, where there is mention of a secluded and special group or battalion of left-handed children of Israel, with the bible going on to say "...among all these people, there were seven hundred chosen men left-handed; every one could sling stones at an hair breadth and not miss..." (The Holy bible, 1982). In addition and according to Judges 3:15-30, after committing evil against God, and having been in bondage under King Eglon of Moab, the children of Israel cried to the Lord who raised a deliverer in the form of the left-handed Benjamite, Ehud, the son of Gera (The Holy Bible, 1982). The question could be whether or not, the bible could have contradicted itself, by condemning the use of the left-hand, yet it seems God blessed such individuals and groups of gallant men or "men of valor" to defend the territory of His children.

Even in the context where there might be ill-regard for the use of the left-hand in the different cultures and religions, there have also been exceptions in the different cultures and religions. Masud et al (2012) highlight that the group is highly honored amongst the Incas, while in the Zuni tribe; left-handedness is associated with good luck, being older and wiser. Mc Namara (2006) also asserts that left-handedness is a symbol of bravery and courage amongst the Boy Scouts. These are a few exceptions, though.

Left-handedness has been associated with myths and fables, and in medieval times, the hand depicted witch-crafts, black arts and magic, sorcery and wizardry (Masud et al, 2012). Without lauding the use of the wedding ring on the left finger, Flatt (1999) posits that even nowadays in Christian marriages, tying the ring on the third finger of the left-hand is a result of the perception that the finger is a "charm finger," which would superstitiously increase power to protect against the forces of black magic.

Characteristics of the Left Handers

It has been discovered that left-handers have characteristics that have given them an advantage over their right-handed counterparts. For example, they are capable of using both their hands better than the right-handers (Llaurens et al, 2009); Gorynia & Egenter, 2000; Judge & Stirling, 2003; Peters, 1989). Out of the findings amongst the Cagayan State University students by Suyu-Tattao (2016), left-handed had a high esteem for being unique and could easily adapt to the challenges of living amongst the right-handed.

Other arguable advantages for the left-handers that have been cited include superior verbal fluency (Hines, Chiu, McAdams, Bentler & Lipcamon, 1992), forms of memory (Christman & Propper, 2001), creativity (Newland, 1981; Coren, 1995) and socio-economic status (Llaurens et al, 2009). Left-handed individuals were also said to be more creative in terms of their tendency to generate or recognize ideas, alternatives or possibilities associated with being useful in problem-solving, communicating with other and entertaining themselves and others (Franken, 1998). In addition, Cropley (1999) has attached creativity to novelty and accordingly, novelty requires originality and newness, which left-handedness appears to provide. Norton (2000) observed that there is a link between left-handedness and intellectual creativity and he concludes that the left-handers are more intelligent

and more eloquent and better at finding solutions to problems.

To an extent, a number of authors have focused on a number of left-handed sport persons involved in disciplines, such as baseball, fencing and tennis, where they have been discovered to excel (Annett, 1985; Voracek, Reimer, Ertl & Dressler, 2006). Llaurens et al (2009) opine that the advantage of the left-handed sports persons is that they are usually confronted by right handed opponents, who are not used to play the left-handers or whom they play less frequently. Even in activities that are more cognate, such as computer games, they have been considered highly competitive (Pawlik-Kienlen, 2008).

In their research amongst those involved in music, Hassler and Birbaumer (1988) discovered that male left-handers were better improvisers and composers, yet there could be need for more research in this particular area. Related to this, a number of authors supported the assumption that the left-handed had better, as opposed to the right handed, motor skills, as well as other various types of performance skills (Annett et al, 1982; Annett et al, 1989). Yet, Kopiez's, Galley and Lee's (2006) research did not find much of a difference in performance between the left and right-handed, which also reinforce other earlier studies that had similar outcomes.

While cognitive issues will remain controversial, a number of authors have argued that the left-handers are more intelligent, compared to their right-handed counterparts. While Williams (1987) argued that the left-handers showed lower performances at high school level, other studies have asserted otherwise. For instance, Faurie, Vianey-Liaud and Raymond (2006) and Ghayas and Adil (2007) discovered that left handed are significantly more intelligent than the right-handed. One might also argue for this, given that a number of the North American Presidents, such as James Garfield, Gerald Ford, Harry Truman, Herbert Hoover, Bill Clinton, George W. Bush, Ronald Reagan, and Barak Obama were or are left-handed. Added to this list would be other renowned world leaders, such as Alexander the Great, Napoleon Bonaparte, Julius Caesar, Simon Bolivar, King George VI, Mahatma Gandhi, Adolf Hitler and Saddam Hussein (Selim, 2002).

In addition, the left-handers have also been discovered to learn foreign languages quicker and

better have a strong spatial perception, are more creative, have a more developed visual memory, and have a better exhibit in fighting (Masud et al, 2012).

Left Handedness and Gender

While gender disparities might vary from one context to the other, a number of authorities that carried out research in a number of areas have argued that it seems there are more female left-handers, which suggest a vital influence of sex in the determinism of the preferred hand (Llaurens et al, 2009; Raymond et al, 2004). In the cases, whereby the father is right-handed and the mother left-handed, there was more likelihood of the child being left-handed, which has been attributed to the mother's greater social influence on the child (Risch and Pringle, 1985; Llaurens et al, 2009). While socialization might play part in hand preference, research amongst the twins concluded that heredity significantly contributes (Llaurens, 2009).

Kershner and Ledger (1985) and Shakeel, Ghayas and Adil (2011), revealed mixed results in the attempt to find out how handedness affects male and female students' intelligence and problem solving abilities. Yet, out of other findings, the left-handed scored higher (Shakeel et al, 2011). The same result further revealed that the left-handed girls were better than their left-handed boy counterparts. It might have to be mentioned, though, that further cognitive research in different contexts might have to be carried out for conclusive results.

Challenges Faced by Left-Handers

In addition to the perception, cultural and religious challenges already highlighted, the left-handers also face challenges of having to suppress the hand that they are comfortable to use. It has been discovered that they usually find themselves out of their natural tendencies, since they have to use tools for routine chores using their right-hand (Masud et al, 2012). As a result, they find themselves having to deal with unworkable desks, peelers that are of no use, ball point pens that spread ink, hence unreadable writing and computer mouse that are manufactured for the right-handed (Flatt, 1999). In addition, Kansanen and Lauerman (1993) found out that the left-handers experience learning difficulties related to writing, reading, as well as comprehend other school subjects, as compared to their right-handed counterparts.

It also has to be mentioned that the left-handers face most of their early challenges from the teachers and parents who compel them to shift hand-use to the right-hand (Crabtree, 2016). Such a challenge for the left-handers, with the teachers and parents being culprits, is also reinforced by Porac and Buller (1990). Teng, Lee, Yang and Chang (1976) also asserted that such suppression or social pressure is usually on eating and writing but would not affect the use of the left-hand for the other tasks.

What Masud et al (2012) call “subtle discrimination,” is also suggested as having been suffered by some of the left-handers. Other left-handers might even have suffered direct discrimination and such discrimination might border on negative stereotyping and prejudice. Other authors have added a number of terms that have apparently exacerbated the left-handers’ situation by referring to them as “crippled,” “illegitimate,” “awkward,” “crooked” or “evil,” “ugly,” “disfigure” or “dishonest,” “malicious,” and “sneaky” (Ibid). In his study amongst students, Coren (1992) found that 91 per cent of the right-handers referred to the left-handers with words, such as “clumsy,” “rude,” “socially inept,” and so forth. According to Masud et al (2012), such kind of discrimination can lead to social isolation, as the left-handers are avoided, if not coerced into eating, writing and performing other chores, using the right-hand, by friends, acquaintances and family. This may result in depression and lack of self-worth in some of the left-handers.

Some African Experiences

Despite the fact that Africa was put under some of the themes in the introduction, the continental cases vis-à-vis the experiences of the left-handers remain largely unexplored. Yet, a glimpse of some of the African experiences are shared by Alhassan (2018) who observes that throughout the continent, it is mandatory to eat with the right-hand, while the left-hand is used to cleanse the body. In the same vein and in declarative language, as well as what he calls a caricature of xenophobia or some kind of fear based on subconsciously off-putting physical movement of those that are left-handed, he highlights that “Whatever you do, do not touch African food with your left hand” (Alhassa, 2018, p. 2). While these extreme positions might not apply to all the continent’s communities, the statement might give a glimpse and depiction of what occurs in some of the extreme cases on the continent. West

Africa has had a fair share of challenges faced by left-handers, with certain communities in Ghana known for considering it a taboo to drink, eat or even point using the left-hand (Coren, 1992). Similar experiences are likely to have been encountered in the communities dotted around the continent.

There are many communities amongst the more than 200 Nigerian ethnic, as well as some of the Ghanaian groups in which the left-handers are referred to as unlucky, clumsy and so forth (Kita, 2001). On the other hand, it has been discovered that some of the religious practices amongst the Yoruba have high regard for the left-hand, which is perceived as sacred, hence also called the “hand of peace” (Alhassan, 2018). In other words, some of the Yoruba communities’ mind-set has changed, which benefits the left-handers. The author also reveals similar challenges faced by the left-handers in Ethiopia, Uganda, Senegal and Zimbabwe, but with different magnitude of tolerance, especially amongst urban communities.

While the position has been gradually changing, the British observed lack of tolerance for the left-handers amongst the Zulu in the early 20th century, with the anthropologist, Dudley Kidd witnessing a case where a child’s hands were dipped in hot porridge as an object lesson against use of the left-hand (Kushner, 2011).

Left-hander experiences have not been explored in the Zimbabwe context and a general concern was raised in a newspaper article by Gomo (2017) in which he postulated that left-handers are likely to be suffering in silence. He further asserted that though computers and cell or mobile phones have attempted to remedy the challenges they face, the minority group still struggles with the very basic items, such as scissors, remote controls and joysticks, zips, shoe laces and sickles; this is in addition to the challenges with the guitars, and ball point pens stationed in institution, such as banks.

This study investigates on the experiences of the left-handers at Solusi University and while modern times might be getting better in terms of responses to left-handedness, there is need for more awareness and exploration in the area of the left-handers because there might be lack of knowledge about the experiences and challenges they face in Zimbabwe, generally, and at the University, in particular. The understanding of this peculiar group might reduce the challenges faced by the left-

handers, in addition to benefitting families, schools and institutions of higher learning.

The study was guided by the following research questions:

1. Is the use of the left-hand hereditary?
2. What challenges do left-handers encounter in their daily lives?
3. What is the relationship between being left-handed and religion and culture?

Research Methodology

This study focused on the daily experiences of the left-handed individuals, who reside at Solusi University. Consequently, this investigation used the interpretative phenomenological analysis, in an attempt to establish and make sense of the experiences of the left-handers. The method is conceptualized as a way to comprehend the context of 'lived experiences' of people or research participants and the meaning of their experiences and it has been expanded to many fields, especially in the education field (Alase, 2017). According to van Manen (1990), hermeneutical phenomenology is the 'lived experiences' of research participants (phenomenology) and the interpretation (text) of the life that they lived and experienced (hermeneutics). The interpretative phenomenological analysis was useful in this study as the researcher looked into the lived experiences of the left-handed in the home and institutional environments.

Population and Sampling

The study involved 24 left-handers and since the left-handed population is uncommon, purposive and snowball sampling techniques were employed; this was intended to understand the unique and experiences of the left-handers. The sample included 14 males and 10 females who were either students or employees at Solusi University. Of these, all were Zimbabweans, save one. All were Christians from different denominations. Their ages ranged from 16 years to above 45 years. While the number of left-handers remains unknown at Solusi University, Africa and universally, it is a known fact that the group is in the minority bracket. It is also assumed that the left-handers face similar challenges with the results of this study being a valid and reliable reflection of their experiences at Solusi and other contexts.

Data Collection Procedure

All participants to this study were contacted and upon being fully informed of the study, they all agreed to participate. Information was then gathered on their lived experiences since childhood, through provided questionnaire guides. Some of the questions in the guide were such as "Do you believe that left-handedness is hereditary?" "Do you think society largely discriminates and suppresses the natural use of the left hand?" "Has there been a time when your family discouraged you from using your left hand?" "Do you think religion restricts your use of the left hand for certain purposes?" "Do left-handers face certain equipment and furniture challenges at Solusi University?" The researcher gave the respondents enough time to give rich responses which were subsequently transcribed according to the different themes.

Data Analysis

Data was coded according to the themes that had been structured by the researcher. In addition, the respondents were also provided an opportunity to add all other information that might not have been part of the questionnaire guide, so as to gather as much information on their experiences as possible. This was also meant to give chance for any emerging themes that the researcher might have missed in the structured questionnaire.

Results and Discussion

Findings to this study provide a better understanding of the experiences of the left-handers from childhood to adulthood. Some of the major themes were heredity, development and association, religion and culture, right and wrong and the challenges that are faced by the left-handers.

Research Question 1: Is the use of the left-hand hereditary?

All the respondents were natural left-handers or they were born left-handed, hence their handedness had nothing to do with, say, their right-hand being injured. As a result, they would use the left-hand for work, eating, writing and so forth.

Results focused on whether or not, left-handedness could be hereditary, whether or not, there have been attempts for them not use the left hand, how religion has responded to their handedness, if they have faced challenges vis-à-vis certain equipment and furniture, if there are advantages for being left-

handed or if they have any regrets for their handedness.

From the findings whether or not handedness is hereditary, 54 per cent believed it is not while 46 per cent thought otherwise. It was interesting to note that all those who disputed the contribution of heredity did not have either of the parents being left-handed; the same can also be said of the majority of those who claimed that heredity influenced handedness. The results also showed that, in cases where one parent is left-handed, the fathers dominated. Interestingly, there was only one case in which the respondent had both parents left-handed. This appears to have helped the respondent to cope with the pressures of being left-handed hence highlighted that,

“Actually, being left handed is the best thing that has happened to me, although the majority are right-handed. The fact that I am left-handed makes me feel so special in so many ways; I use my left hand for chores, writing and eating, and the fact that both my parents are left-handed has minimized pressure on me to use my right hand for the aforementioned.”

While it might be assumed that having both parents being left-handed might influence handedness genetically, McManus' (1991) results showed that there was only a 26 per cent chance of a child in such a situation becoming left-handed. Almost half of the respondents highlighted that they have left-handed siblings; this only adds more cloud to the influence of heredity on handedness.

Still on heredity debate, the majority of the married respondents also highlighted that they had one or more left-handed children. This might be explained in the context of heredity or the child or children copying the hand that one or both of the parents will be using.

In addition, there could also be cases, whereby the respondents might not have known much history of their parents, since some of them might have been precluded from using the left-hand, with some of them shifting to the right-hand permanently. This was the case, as postulated by one respondent who said,

“I later discovered that my father was born a left-hander, who, during the course of his life, was discouraged from using the natural left-hand; he was beaten and coerced to use the right-hand. As a result, he now does

everything with the right hand; it was not his choice, but what this did, was to affect his handwriting, which is not as neat, compared to what it might have been if he had continued to use his natural left-hand.”

Mixed result of the influence of heredity in the findings are a confirmation of the findings of Medland, Duffy, Wright, Geffen and Martin (2006) amongst twins, in which they indicated that heredity contributed roughly 24 per cent to handedness.

Given that handedness would be revealed in chores and throwing of items, eating and writing, one of the experiences of the left-handers had to do with being discouraged from using the natural-hand. Results showed that the majority of the respondents had been largely discouraged from using the left-hand. While there were mixed results on being discouraged and precluded from using the left-hand to write and eat, it appears the majority had their biggest challenge on the latter.

In an apparent attempt to fulfil the adage 'catch them young,' society appears to discourage the left-handers from using their left-hand in their formative years, as one respondent claimed that,

“Being a left-hander is like a curse. At school, especially at Primary level, I used to be thoroughly beaten for writing using my left-hand; I don't know who says everyone should be right-handed.”

Research Question 2: What challenges do left-handers encounter in their daily lives?

The respondents highlighted on a number of challenges that they face, as part of their responses to one of the research questions. One respondent reflected on the challenges faced with the elders who,

Felt disrespected for being handed anything with the left-hand; as a result, most of them would shout at me for using my left-hand to give them anything, and at that age it would confuse me so much, because I was being natural.

One interesting response came from a respondent who hinted that,

I was forced not to use my left-hand to write; let alone eating. What used to happen, was that a plate was placed towards my right hand and I was not allowed to change its position, lest I was going to get a hiding...

What also came out clearly was the fact that being forced from using the left-hand had some psychological effects on the left-handers, especially in their formative years. It is in this context that one of the responses hinted that,

I was beaten for using the left-hand when I started school. As a result, I grew up with a mixed sense of uniqueness that separated me from others, but what this did, was for me to develop an inferiority complex, amongst the right-handed majority.

The psychological effects of forcing handedness were also highlighted in the findings of Masud et al (2012) in which phrases and terms, such as “confusion,” “personality damage,” “fear of devil,” “mental torcher,” would result for the left-handers.

Such psychological effects of forced change of hand-use were also hinted as having caused England’s Duke of York’s stammering at the age of 7 (future King of George, 1895-1952), after he was forced to abandon use of the left-hand (Kushner, 2011). Further studies by the psychologist, Lewis Terman, confirmed that a third to half of stammering of the children in the English schools was a result of trying to convert left-handers to right-handers (Ibid).

From the findings, it also seems the society can go an extra mile in the attempt to alter the wiring of the left-handers, with a respondent giving an experience whereby, “When I was young, in the attempt to have me not use my left-hand, they used to tie a rag on my left palm during eating, but it never worked, since I preferred not to eat...”

Apparently, it seems society had a mind-set that was premised within the notion of how ‘evil’ the use of the left-hand was, but as it has been highlighted above, much of the contention would be witnessed during eating. One perception, which might have been changing over time, was highlighted by one respondent who said,

When I was in Grade 6, my grandfather used to threaten me by saying he would not eat food that had been cooked with the left-hand; I would only use the right-hand during the time he would be watching me, but would quickly switch to my natural left-hand, once he looked the other way; I have tried to use my right-hand to please society, but I have dismally failed...

In the same context of food and its palatability, one respondent also highlighted that,

During the time I would be cooking, the elders would claim that food cooked by a left-hander does not taste delicious. In this context, I managed to change their mind-set, since they found the food enjoyable and tasty...in-fact, in my research I have discovered that food cooked by a left-hand is delicious, comparatively.

In addition, sub-consciously, the right-handed may assume that everyone eats with the right-hand, and this was observed by one respondent, who said that,

At my wedding, the officiating Pastor said ‘lethani izandla zenu zokudla’ (raise the arm that you use for eating). It was interpreted to mean the right-hand, so when I raised my left-arm, some were surprised; the Pastor knowing I am left-handed, ended up having to add that he meant the right hand.

Corroborating with the fact that there are some individuals, families and societies that have tolerated left-handedness, one respondent said,

One person who has supported my use of the left-hand has been my mother; I used to ask her why my right hand was on the opposite side, and she would say ‘That is how The Lord created you my daughter.’ This gave me confidence in my use of the left-hand, and a feeling of uniqueness from the majority. I am the image of God and He is the one who created me this way and He does not make mistakes.

Research Question 3: What is the relationship between being left-handed and religion and culture?

All the respondents that were involved in this study deal with societies that can be broken into those they face at home and on campus, and from the two fronts, they have to deal with certain cultural and religious beliefs. Given the thin line between religion and culture, for this study, the two themes were examined together.

Results from the findings show a balance between those who believe, and those who think otherwise, that they have been prevented from determining a vote in a religious setting using the left-hand. This might also be a result of how the left-handers are wired. When someone refers to the ‘right-hand,’ for some it is merely referring to the hand that they are comfortable to use. This came out via one respondent, who posited that,

I have no challenge when it comes to someone who calls me to use the 'right-hand,' because to me that merely mean that I should use the arm that I'm comfortable to use; in my case, I just raise my left-arm.

What came out clearly though, was the fact that the majority of the respondents believe that culture had a vendetta against the left-handers, which might also be referring to some of the issues that have already been highlighted, including the cooking and eating habits. On the other hand and on the overall, results showed that there was little conflict between left-handedness and the Christian religion.

Results further showed that the left-handers involved in this study had no regrets for their handedness, which might also explain why some of them were excited about who they are. In this context, one respondent observed that, *"Being left-handed is unique, and personally, I have come to appreciate that fact that left-handers are extraordinary; for me, it is deeper than anyone can understand and deeper than anything..."*

The majority of the respondents also faced challenges with the furniture they use at Solusi University, where this research took place. They highlighted that they are less regarded whenever the armed chairs are set for lectures and examinations, but it also seems that their problem commences when less of such chairs are purchased for them. One respondent postulated that,

Almost all equipment we use in life is not user-friendly. At Solusi, we have few chairs for the left-handers, and to compound our challenge, the left-handers have to hunt for the limited chairs meant for them, while lectures and/or examinations are on-going; this disturbs you psychologically, so on the overall, we feel neglected...

One respondent felt that the biggest challenge comes when the faculty and examination administrators do not seem to care for the left-handers, and went on to say that, *"At least the faculty and examination invigilators should give time to make sure that, before the lectures and examinations start, the left-handers are comfortable and have gotten their chairs in place; in the current situation, no-one appears to care."*

During one of the examinations that the researcher invigilated, one of the left-handers was reluctant to be provided with an armed chair meant for the left-handers, and in the questionnaire asserted that,

I do not care anymore and wouldn't want to waste time looking for or asking for an appropriate chair during examinations; I have resorted to using armed chairs for the right-handers as a result; so for now, I am okay with inappropriate chairs-since I came to Solusi, no-one appears to care for the left-handers...

The findings pertaining the use of chairs and desks meant for the right-handed are synonymous with those of Masud et al (2012), who discovered that such challenges would result in the left-handers writing clumsily and in unreadable handwriting, while spreading ink on the writing sheets. This is so, given that the palm will shift from the left to right and over the written words.

One theme that was raised by a few left-handers, and which may need further research pertained to the writing speed of the left-handers. In the context, one respondent said, *"Furthermore, left-handers are slow in writing, and I remember there was a time I requested a faculty member for an extended time during an examination; the lecturer told me off."* Therefore, there could be need for further study vis-à-vis the impact of the left-handers' use of the right-armed chairs during the examinations on the handwriting and time to finish the exercise, since one respondent feels that, *"When it comes to examinations, I have to use chairs for the right-handers, which means I struggle to finish examinations in 3 hours..."*

Conclusions and Recommendations

This section presents the conclusions of the study and the corresponding recommendations as follows:

Conclusions of the Study

The study gives the following conclusions with regard to left handed experiences at Solusi University:

1. Regarding whether or not left-handedness is hereditary, the majority of the respondents did not have both or one of the parents being left-handed, while others had distant left-handed relatives. In addition, there was only one respondent, who had both parents who were left handed. Therefore, the study remains inconclusive whether left handed is hereditary or not.
2. The left-handers faced a number of challenges that include misperceptions from

- the majority, right-handers in the areas such as being forced from using the left-hand for writing, eating, cooking and so forth. The biggest challenge was found to be most pronounced in the countryside, where specifically, certain cultures still have a challenge with appreciating left-handedness.
3. Respondents faced other challenges that include negligence and complacency, which affected them; consequently, they were not provided with suitable chairs and other equipment, nor are their challenges and needs looked at.
 4. Culture and religion had some influence and impact, which at times show intolerance towards the left-handers.

Recommendations of the Study

The following recommendations are given in response to conclusions of the study:

1. Since charity begins at home, families and communities have to have a change of the mind-set, so as to tolerate left-handedness, especially at the early age of the children. This is so, since the left-handed might end up being affected psychologically and physically through being coerced to change their handedness.
2. Despite being inclusive, one recommendation will be for parents and society to deliberately identify handedness early in the life of the children, so as to find ways to mitigate that challenges likely to be faced by the minority left-handed children, as well as nurture their attitude and behaviors accordingly.
3. It is also recommended that there be national and institutional policy-formulation and implementation so as to address the challenges faced by left-handers. Such may include setting up organizations towards the commemoration of left-handedness. While the 13th of August is the International Left-handers Day, more could be done to make sure that such days become more visible at institutional, national and international levels.
4. There is need to make sure that equipment such as chairs, computers and so forth, consider handedness amongst the students

and workers at Solusi University and in other learning institutions.

5. There is need for further research on the possibilities of the young left-handers being taught to write from the right side of the pages, so as to avoid spread of ink on the pages.
6. A similar study is recommended to determine whether or not left handed are slow in writing, as highlighted by some respondents, which will help institutions to address such challenges accordingly.

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