

## Cultural Underpinnings on the Use of Left-Hand in Gbanjong Community of the Tolon District of Ghana



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### ABSTRACT

It is a common belief in Ghana's Tolon District's Gbanjong community in the Northern region that left-handed people are less effective in society. The research looked into the cultural influences or underpinnings on the use of the left-hand in the Gbanjong community. The study employs a qualitative research methodology. Data was gathered through interviews, observation, and focus groups. There was a review of both primary and secondary literature. For people who use left-hand in the community, a purposive sampling strategy was applied. The study also used a random sample of chiefs, sub-chiefs, and opinion leaders. In all, 47 community members were sampled and interviewed. The study revealed some cultural underpinnings on the use of left-hand in the community, such as bad luck, can only marry chiefs and princes, cannot make quality traditional cultural local meals, myths, Evil and devilish occurrences. There were also some psychosocial and theological biases discovered during the research. The research revealed that left-hand users want changes that take into account their functionally diverse attributes and demonstrate a greater level of cultural tolerance towards them. Individual differences must be recognized and accounted for in all cultural customs and traditional issues, in accordance with Article 3 (1 p.2) of the Convention on the Rights of the Child. The study concludes that the people of the Gbanjong community in Ghana's Tolon District should not have their choice of hand as a cultural grounding. The study has established that there are some cultural underpinnings or obstacles that exist in the world for left-hand use and contributes to the existing data on social acceptance of persons who are created differently.

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### INTRODUCTION

The tendency for a person to use one hand, the dominant hand, better, faster, and more precisely than the other is known as handedness. For at least 5000 years, right-handed people have been shown in art, and it appears that most humans have been right-handed for millions of years. Left-handed persons

have traditionally had to deal with a plethora of challenges, including disparaging words, nicknames, and religious persecution.<sup>1</sup> Under the rubric of 'neuromythology,' there has undoubtedly been a slew of inaccurate and misleading notions about handedness. As Mike-Corballis and Ivan correctly pointed out, the symbolism that pervades asymmetry frequently gives rise to myths, with 'right' being seen as 'good' and 'left' as 'bad.'<sup>2</sup> The intellectual disparities between left-handed and right-handed students have been discussed in several studies. Other researchers have looked at left-problems handedness and cross-generational issues.<sup>3</sup> The cultural underpinnings of the use of left-handed in most Ghanaian communities, particularly in the northern half of the country, have received minimal consideration. Furthermore, when considering the lack of focus on the Cultural Underpinnings of the use of Left-Handed, the problem becomes much more pressing. The purpose of the study is to examine the Cultural Underpinnings of the use of Left-Hand in the Gbanjong community of the Tolon district. The study is a qualitative research, a purposive sampling technique and observation were used. An interview guide and focus group approach were used to collect data.

## LITERATURE REVIEW

### Theoretical Perspectives

The study used the Developmental-ecological theory, which relies on the domains of human development, behaviour, and ecology to examine how humans shape and are shaped within complex and dynamic cultural and historical environments.<sup>4</sup> Culture, school, religion, family, environment, society, and community all play a role in human growth and behaviour.<sup>5</sup> Right-handed people constructed the world from the top down for right-handed people, and the left-handed population must adapt to fit in.<sup>6</sup> Scientists sometimes feel that environmental factors influence handedness more than genetic factors. They believe that factors present in the womb (such as hormone exposure) can influence whether the right or left hand is favoured later in life.

Hand preference is a basic behavioural feature associated with asymmetry in the human brain. Hand preference and quantitative assessments have been connected to a small number of genetic variants.<sup>7</sup> The fact that the vast majority of people are right-handed is readily visible in everyday life. Handedness has been documented since antiquity.<sup>8</sup> For at least 5000 years, artistic portrayals demonstrate a predominance of right-handers,<sup>9</sup> and most humans have been right-handed for several years, despite other animals showing a much closer 50:50 right-left split.<sup>10</sup> Although archaeological evidence from Neanderthals suggests that left-handed individuals have existed for at least half a million

<sup>1</sup> Sara Scharoun and Pamela Bryden, "Hand preference, performance abilities and hand selection in children." *Frontiers in Psychology* 5 (2019): 82.

<sup>2</sup> Mike Corballis and Ivan L. Beale, *The Psychology of left hand right hand* (London: Routledge Britain, 2020).

<sup>3</sup> Benerdeta M. Malusi. "Challenges left-handed students face in Kenyan High School Science Laboratories." *African Journal for Research in Chemistry Education* 4no.3, (2015): 50-81; Steve Silverman, Stance for Left-handed Golfers, 2012. Accessed June 15,2013. [www.golflink.com/how\\_317\\_stance\\_lefthanded-golfres.html](http://www.golflink.com/how_317_stance_lefthanded-golfres.html)

<sup>4</sup> Urie Bronfenbrenner and Pamela A. Morris, *The Ecology of Developmental Processes*. Theoretical models of Human Development (5<sup>th</sup> Ed) (New York: John Willey, 2016), 793-828.

<sup>5</sup> Mike Cole and Natalia Gajdamaschko, Vygotsky and culture. In Daniels H. J. Cole, M. and Wertsch J. (Eds) *Cambridge Companion to Vygotsky* (New York: Cambridge University Press. 2019).

<sup>6</sup> Yusura Masud and M.Asir Ajmal, "Left-handed People in a Right-handed World: A Phenomenological Study." *Pakistan Journal of Social and Clinical Psychology*, 10no.1, 2015.

<sup>7</sup> Carolien G.F. De Kovel, and Clyde Francks, "The Molecular Genetics of Hand Preference Revisited," *bioRxiv* 447177, 2018. <https://www.biorxiv.org/content/10.1101/447177v5>

<sup>8</sup> Ian C. McManus, S. Shergill, and M.P. Bryden, "Annett 's Theory That Individuals Heterozygous for the Right Shift Gene Are Intellectually Advantaged: Theoretical and Empirical Problems." *British Journal of Psychology*, 84 no.3, (2018), 517.

<sup>9</sup> McManus, Shergill and Bryden, "Annett 's Theory that Individuals Heterozygous for the Right-Shift Gene Are Intellectually Advantaged," 517.

<sup>10</sup> McManus, Shergill and Bryden, "Annett 's Theory that Individuals Heterozygous for the Right-Shift Gene Are Intellectually Advantaged," 517.

years, the origins of left-handedness remain unknown.<sup>11</sup> Human handedness influences how one pays attention to, processes, and interacts with the physical world. Given that right-handed people make up around 90% of the population, the world was designed and built mostly for them.

The 'left' is often connected with femininity in the great majority of civilizations from every continent, including Africa, Asia, Australia, Europe, and America, whereas the 'right' is typically associated with masculinity.<sup>12</sup> Connecting Traditional Belief Systems can help sustain Natural Resource Conservation and Sustainability of some cultural and traditional customary values.<sup>13</sup> Following cultural traditions and ethos are vital since they serve to keep the society together and peaceful. However, if a tradition is followed due to ignorance, bigotry, or injustice, it should be abandoned. In Calabar, Nigeria, for example, ignorance led to the acceptance of the killing of twins as a rite because it was thought that only animals gave birth in pairs: yet, children are a blessing and confirmation of man's continued survival and success in traditional African households.<sup>14</sup> In several European languages, including English, the term "right" also means "correct" or "suitable".<sup>15</sup> According to global studies on handedness, just about 10% of the population is left-handed.<sup>16</sup> Because of their cultural differences, the right-handed majority has always regarded left-handed people as unfortunate or even evil.<sup>17</sup> Handedness has a convoluted inheritance pattern.<sup>18</sup> Many items and procedures are designed to make it easier for right-handed people to use them, without taking into account the difficulties that left-handed people confront. Left-handed people have faced discrimination in a world designed for right-handed people for millennia. From an observational point, in some Ghanaian cultures and practices, using the left hand to make motions or point at items is considered disrespectful and culturally rude.

King George VI (1895-1952) was naturally left-handed as a child.<sup>19</sup> As was the standard at the time, he was compelled to write with his right hand. He had no intention of becoming king; therefore this was not a factor. According to McManus et.al, workers needed to handle complicated machinery that was developed with right-handers in mind when the Industrial Revolution swept across Western Europe and the United States in the 19th century.<sup>20</sup> This would have increased the visibility of left-handed people while simultaneously making them appear less capable and ungainly. During this time, children were taught to write with a dip pen. While a right-handed individual can easily drag a pen from left to right across a piece of paper, a dip pen cannot be pushed across without digging into the paper and causing blots and stains.

Teachers aren't the only ones who influence a child's favoured hand; parents play an important role in presenting and supporting the notion that being left-handed is undesirable.<sup>21</sup> Giving anything to

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<sup>11</sup> Tom Van Agtmael, Susan M. Forrest and Robert Williamson, "Parametric and non-parametric linkage analysis of several Candidate regions for genes for human handedness," *European Journal of Human Genetics*. 10 (10) (2019): 623–30. doi:10.1038/sj.ejhg.5200851

<sup>12</sup> Azubike F. Uzoka, "The African Child and the Dilemma of Changing Family Functions: A Psychological Perspective." *African Social Research*, 30(2019):851-867.

<sup>13</sup> Zakaria Shanunu, Adams Sulemana Achanso and Eliasu Mumuni, "Connecting Traditional Belief Systems, Natural Resource Conservation and Sustainability in West Gonja Traditional Area of Ghana." *Journal of Energy and Natural Resource Management (JENRM)*, 8, no.1, (2022): 17-25, DOI: 10.26796/jenrm.v8i1.193

<sup>14</sup> Shanunu, Achanso and Mumuni, "Connecting Traditional Belief Systems, Natural Resource Conservation and Sustainability in West Gonja Traditional Area of Ghana," 17-25.

<sup>15</sup> M.K. Holder, What does Handedness have to do with Brain Lateralization (and who cares?) 2018. Accessed August 11, 2019. <https://primate.sitehost.iu.edu/brain.html>

<sup>16</sup> J.M.M. Goodman, J.P. Aggleton, and R.W. Kentridge, "Handedness and Musical Ability: A Study of Professional Orchestral Players, Composers, and Choir Members." *Psychology of Music* 22, (2020): 148–156.

<sup>17</sup> Goodman, Aggleton and Kentridge, "Handedness and Musical Ability: A Study of Professional Orchestral Players, Composers and Choir Members." 148-156.

<sup>18</sup> Sarah E. Medland, D.L. Duffy and M.J. Wright, "Genetic Influences on Handedness: Data from 25,732 Australian and Dutch Twin Families." *Neuropsychologia*. 47 (2), (2019): 330–337.

<sup>19</sup> Denis Judd, George, *King of Great Britain*. (London: IB Tauris & Co Ltd, 2014).

<sup>20</sup> Judd, George, *King of Great Britain*.

<sup>21</sup> Peter Sarpong, *Ghana in Retrospect: Some Aspect of Ghanaian Culture*. (Tema: Ghana Publishing Corporation 2014), 45.

someone with the left hand, whether an adult or a child, is frowned upon in Yoruba culture.<sup>22</sup> When someone offers something to the other person with his left hand, it is a sign of complete contempt for them. Furthermore, the left hand is associated with filth and is culturally irrelevant. The Yoruba man, for example, uses his left hand to clean himself after defecating, pick up trash from the ground, and grab filthy, stinky, or unpleasant objects for disposal. People dread utilizing their left hand as a result. In Ghana, using the left hand to point, gesture, and give or receive objects is considered impolite.<sup>23</sup> Aside the inconvenience, the right-handed majority has always regarded left-handed people as unlucky or even evil due to their uniqueness.<sup>24</sup> Being left-handed has been stigmatized throughout history; even in the twentieth century, professors scolded left-handed students for using their left hands to write.<sup>25</sup> The Latin adjective sinister or sinistra (as applied to male or female nouns - Latin nouns are gender-specific) means both "left" and "unlucky," and this dual meaning is preserved in European derivatives of Latin, such as the English words "sinister" (meaning "evil" and "on the bearer's left on a coat of arms") and "ambisinister" (meaning "awkward or clumsy with both or neither hand")

Negative connotations associated with the term "left-handed" include clumsy, awkward, unfortunate, deceptive, evil, wicked, and so on.<sup>26</sup> A "left-handed compliment" can be interpreted in two ways, one of which is undesirable to the person receiving it. In French, gauche means "left," "awkward," or "clumsy," whereas droit(e) means "right," "straight," "law," and the legal sense of "right" in English. The term "dexterity" refers to manual dexterity, whereas the name "Dexter" is Latin for "right." Because these are all ancient words, they seem to support the notion that right-handedness is a recent phenomenon. The "left-hand way" is how black magic is described."<sup>27</sup> Majority of Nigerians regard pointing with the left hand to be impolite.<sup>28</sup> This definition of pointing includes gestures that indicate a direction toward a location as well as movements that indicate a direction away from a location.<sup>29</sup> Until recently, left-handed people in Taiwan (and still in Mainland China, Japan, and both North and South Korea) were forced to convert to right-handedness, or at the very least adapt to writing with the right hand.<sup>30</sup> Because of the importance of stroke order, which was established for the comfort of right-handed individuals, writing legible Chinese characters with the left hand is regarded as more difficult than writing Latin letters.

However, writing difficulties is subjective and depends on the writer, because smudging can occur if the outward side of the hand is allowed to drag over the writing when moving one's hand away from its side towards the other side of the body. In some cases, writing in the Latin alphabet with the left hand may be more difficult than with the right. Right-to-left alphabets, such as Arabic and Hebrew, on the other hand, are often thought to be easier to write with the left hand.<sup>31</sup> Left-handed writers can write as cleanly and efficiently as right-handed writers, depending on the location and inclination of the writing paper as well as the writing approach. Because finding a comfortable left-handed writing approach on one's own might be difficult, most left-handed children need to be taught how to write appropriately with their left hand. All left-handed youngsters in the Soviet Union were compelled to write with their right hand in the Soviet education system as opined by Essien

## Religion and Left-Handed

Religion is a social-cultural system that links humanity to supernatural, transcendental, and spiritual elements through prescribed behavior and practices, values, beliefs, worldviews, texts, hallowed

<sup>22</sup> Sarpong, *Ghana in Retrospect: Some Aspect of Ghanaian Culture*, 55.

<sup>23</sup> Sarpong, *Ghana in Retrospect: Some Aspect of Ghanaian Culture*, 78.

<sup>24</sup> David H. Barlow, *Casebook in Abnormal Psychology* (2nd Ed.) (New York: Wadsworth Thomson Learning, 2018).

<sup>25</sup> Barlow, *Casebook in Abnormal Psychology*, 101.

<sup>26</sup> Barlow, *Casebook in Abnormal Psychology*, 161.

<sup>27</sup> Barlow, *Casebook in Abnormal Psychology*, 89.

<sup>28</sup> Micah Emem Essien, *The Myth of the Left-Handed Ones*. 2021. Accessed June 16, 2022.

<https://guardian.ng/life/the-myth-of-the-left-handed-ones/>

<sup>29</sup> Essien, *The Myth of the Left-Handed Ones*.

<sup>30</sup> Essien, *The Myth of the Left-Handed Ones*.

<sup>31</sup> Essien, *The Myth of the Left-Handed One*.

locales, prophecies, ethics, or organizations.<sup>32</sup> Vergote also agreed that men are slightly more likely than women to be left-handed.<sup>33</sup> When analyzing the term "sin," the word "sinister" springs to mind. Being left-handed means preferring to use the left hand for reaching, throwing, pointing, and catching. Left-handedness is an enthralling, though occasionally distressing, phenomenon. It's like trying to use a right-handed potato peeler, right-handed scissors, a right-handed mouse, or any other right-handed device as a student. "He sits at the right hand of God the Father Almighty," according to the Apostles' Creed, has both theological and practical implications. The "right hand" is regarded as an honorable and prestigious position throughout the Bible.<sup>34</sup> When the Bible says Jesus Christ sits at the right hand of the Father, it means he shares the same Godhead position as the Father.<sup>35</sup> Self-importance and centrality are associated with the left-hand path, as well as a rejection of religious authority and social taboos.<sup>36</sup> In the Bible, the right hand is mentioned 100 times in a favourable aspect, while the left hand is mentioned only 25 times in a negative light. The right hand is shown as the hand of power in Exodus 15:6 and Psalm 118:16 in the New International Version (NIV). As a result, the Bible places a larger value on the right hand than the left. Even though Ephraim was the younger, Israel put out his right hand and laid it on his head, crossed his arms and placed his left hand on Manasseh's head. Because the right-hand use was associated with a bigger blessing, it was assumed that God also favoured the right hand in other situations.<sup>37</sup>

The right hand of God is the preferred hand in various religions, including Christianity. 'After the Lord Jesus spoke to them (the Eleven disciples), he was taken up into heaven and sat at God's right hand,' for example. The left hand of God, on the other hand, is a hand of judgment.<sup>38</sup>

In Islamic traditions, it is said that holding the Qur'an in the right hand is more appropriate because it is a symbol of respect for it. The Prophet's Sunnah demonstrates that "we should utilize our right hand in all we want to honour."<sup>39</sup> When putting on his shoes, brushing his hair, applying perfume, and in all his affairs, the prophet preferred to start with his right hand or right side (over the left).

The prophet Aa'ishah used his right hand to apply perfume and eat, while his left hand was used to go to the bathroom or treat any injuries. AL-'Izz Ibn 'Abdus-Salaam spoke eloquently about the need of employing the right hand, stating that encountering what is honourable is without a doubt something nice (logical) in mind. It's also worth noting that Abdullah quoted Allah's Messenger as saying, "Do not eat with your left hand, because Satan eats with the left hand."<sup>40</sup> People in many Islamic countries are forbidden to eat with their left hand, which is deemed 'unclean' because it is used for cleaning-up faeces.<sup>41</sup> Furthermore, in several Islamic nations, particularly Saudi Arabia, 'public display' or the usage of the left hand is prohibited. According to Alhassan, a Muslim is obligated to eat with his or her right hand. Eating with the left hand is prohibited for Muslims.<sup>42</sup> When the Prophet noticed a guy eating with his left hand, he told him that he should eat with his right. When the guy stated that he was unable to do so, the Prophet replied, "May you never do so." The man's ability to raise his right arm was lost from that point on.<sup>43</sup> It's crucial to note that the Qur'an holds the position

<sup>32</sup> Antoon Vergote, *Religion, Belief and Unbelief. A Psychological Study*, (Belgium; Leuven University Press, 2017), 16.

<sup>33</sup> Vergote, *Religion, Belief and Unbelief. A Psychological Study*, 16.

<sup>34</sup> Hebrews 1:3, 12:2; 1 Peter 3:22; Acts 7:55-56.

<sup>35</sup> Hebrews 1:3, 12:2; 1 Peter 3:22; Acts 7:55-56.

<sup>36</sup> Francis Diawuo and Abdul Karim Issifu, "Exploring the African Traditional Belief Systems in Natural Resource Conservation and Management in Ghana." *The Journal of Pan African Studies*, 8, (2019): 115-131.

<sup>37</sup> Daniel Wilson, *The Right-Hand: Left-Handedness*. (London: Macmillan & Company, 2019).

<sup>38</sup> Carolyn Asbury, *Left Hand, Left Brain, The Plot Thickens*. (The DANA Foundation. 2019).

<sup>39</sup> Asbury, *Left Hand, Left Brain, The Plot Thickens*.

<sup>40</sup> A.B. Alhassan, *Fostering Mental Health of the Teacher and School Children In: I.O Salawu, A.I. Ikeotuonye, J.O Inegbedion (Eds.). Perspectives on Nigerian Education*. (Published by School of Education, 2016), 4:31-50.

<sup>41</sup> A.B. Alhassan, *Concise Modern Dictionary of Educational Psychology*. (Zaria Nigeria: Tamaza Publishing Company, 2017).

<sup>42</sup> Alhassan, *Concise Modern Dictionary of Educational Psychology*.

<sup>43</sup> Alhassan, *Concise Modern Dictionary of Educational Psychology*.

that a child can write with his or her left hand without difficulty. It is permitted to write with the left hand, according to the Ulama. Apart from eating and drinking, which should be done with the right hand, everything else can be done with the left.<sup>44</sup>

In chapter 56 (al-Wqi'ah), the Qur'an mentions two types of virtuous people: the People of the Right Hand and the Foremost Ones. The former is covered by the golden means theory of ethics, but not the latter. "Do not keep your hand chained to your neck, nor open it entirely."<sup>45</sup> "Those who, when spending, are neither wasteful nor tight-fisted, and moderation lies between these extremes."<sup>46</sup> "Those who, when spending, are neither wasteful nor tight-fisted, and moderation lies between these extremes."<sup>47</sup> "Do not be loud in your prayer, nor mutter it; instead, strike a balance between the two."<sup>48</sup> "Eat and drink, but don't overdo it. 'Who has banned Allah's adornment and the good items of His provision, which He has brought forth for His servants?' 'These are for the believers in this world's life,' say."<sup>49</sup> "Then the One who gave you two hands to do things with, some of which are noble, such as picking up the Mus-haf, and some of which are ignoble, such as removing impurities, so if you pick up the Mus-haf with your left hand and remove impurities with your right hand, then you have wronged it and turned away from what is proper," said Al-Ghazali in al-Ihya'.<sup>50</sup>

### Left-handed and Physical Activity

Left-handers face a slew of minor daily challenges that right-handers may overlook. One thing that is more difficult for lefties is using scissors. Male lefties outnumber female lefties.<sup>51</sup> Physical exercise is a broad and ambiguous term that refers to a variety of activities.<sup>52</sup> The most obvious advantage of a left-handed fighter is that opponents are less familiar with their stances, motions, and angles, which can result in a sense of surprise and unpredictability.<sup>53</sup> Santrock agreed that being left-handed can be advantageous in certain sports.<sup>54</sup> People who are "left-handed" are associated with negative stereotypes and connotations. Mungai and Odiemo sought to see if people who are left- or right-handed can learn a skill by watching a demonstration by a right- or left-handed instructor. They sought to investigate if there are any categorical differences between right- and left-handed people, and if so, how these differences affect learning.<sup>55</sup> Left-handed people who saw a right-handed example were expected to perform substantially better than right-handed people who saw a left-handed presentation.

### Cultural and Environmental Issues

Many people in Ghana believe that pointing with one's left hand is impolite.<sup>56</sup> The authors looked at how this taboo affected Ghanaian gestural behaviour by observing gestures used in naturalistic scenarios where people were offering directions. To begin, place the left hand on the lower back as if to hide it from the interlocutor. Second, as a result of left-hand suppression, right-handed pointing in

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<sup>44</sup> Alhassan, *Concise Modern Dictionary of Educational Psychology*.

<sup>45</sup> QURAN: Surah Al-Isra Ayat 29 (17:29 Quran) With Tafsiir.

<sup>46</sup> QURAN: Surah Al-Isra Ayat 29 (17:29 Quran) With Tafsiir.

<sup>47</sup> QURAN: Surah Ayah Furqan, 25-27.

<sup>48</sup> Quran, Surah Al-Isra Ayat 110. 17:110.

<sup>49</sup> QURAN: Surah Al- Araf Ayat 31, 7:31-32.

<sup>50</sup> William Montgomery Watt, "al-Ghazālī". Encyclopedia Britannica, <https://www.britannica.com/biography/al-Ghazali>. 2022; M.F. Dada, Attitude Toward Left-handedness as Perceived by Selected Secondary School. Students in Kogi State. Unpublished M.Ed. Thesis, University of Ilorin. 2019.

<sup>51</sup> Angus Davison, John A. Armour, and I.C. McManus, "Genome-Wide Association Study of Handedness Excludes Simple Genetic Models". *Heredity*. 112 no.3 (2017): 221–5. doi:10.1038/hdy.2013.93

<sup>52</sup> Chieh-feng Chen, et al., Factors Influencing Interest In Recreational Sports Participation and its Rural-Urban Disparity. *PLOS ONE* 12(5), (2019): e0178052. <https://doi.org/10.1371/journal.pone.0178052>.

<sup>53</sup> John W. Santrock, Motor, Sensory, and Perceptual Development. Mike Ryan (Ed) *A Topical Approach to Life-Span Development*, (Boston, MA: McGraw-Hill Higher Education. 2020), 172–205.

<sup>54</sup> Santrock, *Motor, Sensory, and Perceptual Development*, 172-205.

<sup>55</sup> Cheggeh Mungai, and Luke Odiemo, "Left Handedness as an Overlooked Special Learning Need." *International Journal of Learning and Development*. 2 (2018), 12.

<sup>56</sup> Sarpong, *Ghana in Retrospect: Some Aspect of Ghanaian Culture*.

a leftward direction across the body may contain an anatomically aberrant posture. Third, pointing with both hands at the same time is not prohibited. Despite the taboo, left-handed pointing is not absolutely prohibited. According to Pillar et al., left-handed pointing movements are linked to the verbalization and conveyance of an idea with the left in a Peruvian school, implying the embodied part of the concept.<sup>57</sup> Furthermore, there is a subset of left-handed motions that are so simplified that Ghanaians do not regard them as pointing for taboo purposes.<sup>58</sup> The preservation of cultural and traditional legacy, according to Duxbury et al. enables the formation of memories.<sup>59</sup> Cultural and customary practices bridge the gap between the past, present, and future while simultaneously providing a conflict risk. Understanding the diverse groups' heritage values is an important step in heritage management.<sup>60</sup>

Rueckert and Brinkman discovered evidence that cultural and environmental factors influence left-hand preference in communities, particularly for well-trained tasks.<sup>61</sup> According to Fernández-Flecha et al. in the study of left-handedness prevalence in various countries, environmental pressure or inherent bias means that a product or system has built-in advantages for one hand over the other.<sup>62</sup> According to the "right-sided world hypothesis" of Hardyck and Petrinovich, the physical environment favours the right-handed majority.<sup>63</sup> They also added that up to 98% of equipment in technologically advanced countries is built for right-handed persons, including common household instruments like scissors, can openers, and culinary utensils.<sup>64</sup> Left-handed folks may find these instruments to be particularly difficult. Left-handed people must learn how to grasp and manipulate right-hand orientated equipment and instruments. Left-handed people, on the other hand, must switch hands, which they are often forced to do.<sup>65</sup> Religion also affected the image of the left hand, as the left side was traditionally thought to be the devil's side. Several studies have sought to link socially unacceptable behaviours, diseases, and a shorter lifespan to left-handedness.<sup>66</sup> According to Loffing et al., in Malawian culture, greeting someone with the left hand is considered disrespectful.<sup>67</sup> It is also considered impolite to eat with one's left hand in public, especially among Muslims and tribes with oriental traditions.<sup>68</sup>

<sup>57</sup> Maria Pilar, Gamarra Choque, Edith Gissela Rivera Arellano and Enaidy Reynosa Navarro, "Children with severe Disabilities: Adaptation, Virtual Education, and Prospects. Experiences of Three Peruvian Mothers, Covid-19 Context." *Journal of Medicine and Life* vol. 15 no.1, (2022): 43-51. doi:10.25122/jml-2021-0330.

<sup>58</sup> Sotaro Kita and James Essegbey, "Pointing left in Ghana: How a taboo on the use of the left hand influences Gestural practice" *Gesture* 1no.1, (2012): 73 - 95 DOI: <https://doi.org/10.1075/gest.1.1.06kit>.

<sup>59</sup> Nancy Duxbury, Catherine Cullen and Jordi Pascual, Cities, Culture and Sustainable Development. In: H.K. Anheier, Y.R. Isar, M. Hoelscher M et al (eds) Cultural Policy and Governance In A New Metropolitan Age. The Cultures and Globalization Series, Vol 5. (London Sage Publications Ltd, 2015), 73–86.

<sup>60</sup> David Tacey, *Edge of the Sacred: Transformation in Australia*. (Sydney: Harper Collins. 2010)

<sup>61</sup> L. Rueckert and D. Brinkman, *Bimanual Coordination Deficits in Left-Handers*. A paper presented at the Annual Meeting of the Cognitive Neuroscience Society, New York, NY. 2016.

<sup>62</sup> María Fernández-Flecha, María Blume, Andrea Junyent and Talía Tijero Neyra, "Gesture development in Peruvian children and its relationship with vocalizations and vocabulary." *Gesture*, 20 no.1 (2021): 1-29. DOI: <https://doi.org/10.1075/gest.18010.fer>.

<sup>63</sup> Curtis Hardyck and Lewis F. Petrinovich, "Left-handedness." *Psychol Bull.* 84 no.3 (2018): 385–404. doi:10.1037/0033-2909.84.3.385. PMID 859955.

<sup>64</sup> Hardyck and Petrinovich, "Left-handedness," 385-404.

<sup>65</sup> Hardyck and Petrinovich, "Left-handedness," 385-404.

<sup>66</sup> E. Emore, Oladunni A. Ebeye, and Helen K Odion, Obomhense and P.S.A. Igbigbi, "Look at the Effect of Hand Dominance on Learning." *Journal of Applied Sciences*, 8no.6, (2018): 173- 176. Accessed August 2018 from

<sup>67</sup> Loffing, Hagemann, and Strauss, "Left-Handedness in Professional and Amateur Tennis."

<sup>68</sup> M. Abdulla, "Culture, Religion, and Freedom of Religion or Belief." *The Review of Faith and International Affairs*, 16 no.4, (2018): 102–115. <https://doi.org/10.1080/15570274.2018.1535033>.





### Population, Sample Selection and Sample Size

The Gbanjong community served as the study's subject. All traditional chiefs, sub-chiefs, religious and opinion leaders who actively participate in community cultural activities make up the sample size. These traditional leaders were chosen because of the positions they occupy in the community's cultural affairs. They have also lived in the community for more than 34 years. The age range for the chiefs' sub-chiefs, religious and opinion leaders in the community range from 45 years to 75 years. Purposive sampling was also employed to select left-handed people. It was chosen because its sample decisions have an impact on not only the selection of participants, but also the incidence, events, and data gathering operations.<sup>73</sup> As part of the sample, members of the community were also selected. The criteria used in the selection of these community respondents depended on the number of the purposively selected left-handed people. Two members each were selected from the households from which the left-handed respondents were selected. This means that, in every household that we selected a left-handed person, two members from that same household were selected. This was done because these household members live with the left-handed people and will be able to provide more information on them as the study sought to unveil. In all, the total sample size for this study was 47. Table 1 shows the summary of the response units and sample size for this study.

**Table 1: Summary of sample size**

<b>Response Units</b>	<b>Number of Respondents</b>
Chief of Gbanjong	1
Sub-chiefs	3
Opinion Leaders	4
Religious Leaders	3
Left-Handed Community members	12
Community members	24
<b>Total</b>	<b>47</b>

*Source: Fieldwork, 2022*

### Data Collection and Analysis Techniques

In-depth interviews and a Focus group approach were used in the collection of the data. The interview guide was semi-structured, self-designed by the authors and administered to the 23 participants of the study. The interviews were recorded using an audio recorder after permission was sought and granted. In this regard, the data was protected using pseudonyms. Each interview took about 35 minutes. The data was collected in March 2022. The authors and research assistants translated the interview guide into the local language (Dagbani) for respondents since most of them could not speak and understand the English Language.

In analysing the data, the recorded data was first transcribed after which thematic analysis was employed. This format was accomplished by first providing a description of an issue (theme) manually following an inductive process. A validation session was organised with some of the key informants to ensure the accuracy of the results.

### RESULTS, FINDINGS AND DISCUSSIONS

Left-handed people are often stereotyped as being less significant members of society. Others, on the other hand, consider them to be nothing special. This research is eye-opening in terms of the

Changes in the Sunyani Municipality, Ghana.” *Journal of Urban Affairs*, 2022.

DOI: 590 10.1080/07352166.2022.2044836.

<sup>73</sup>J. K. Ogah, *Decision Making in the Research Process – Companion to Students and Researchers*, (Accra: Adwinsa Publications (GH) Ltd, Accra Ghana Publishing Corporation. 2013).

community's cultural underpinnings of left-handedness. Chiefs, sub-chiefs, and opinion leaders as well as those who are left-handers were interviewed. To make it easier to understand, the field data was transcribed and divided into teams which are discussed in subsequent sections.

### ***What are the Cultural Customs and Traditional Underpinnings against the Use of the Left-hand in your Community? (Chiefs, sub-chiefs, opinion leaders)***

In responding to the question by the Chiefs, sub-chiefs, opinion leaders and some community members sampled, the following were revealed: bad luck associated with the use of the left-hand, the ability to only marry chiefs and princes, and the inability to prepare quality local meals; preferential treatment for the right-handed because the left-handed appear unusual and unclean; myths, Evil, Devilish, Taboos, and ancestor curses. They also sought to portray that left-hand users easily get angry and aggressive. Ogah's claim that the left-hand path is about elevating and centralizing oneself, as well as rejecting religious authority, traditional practices, and society taboos, is supported by this data.<sup>74</sup> Left-handed people have long been looked down upon and treated as outcasts. Left-handed persons dreaded being accused of witchcraft in the Middle Ages.

One of the sub-chiefs concluded that: *"the left hand has no role to play in cultural and customary rites in the community when it comes to ritual performances."*

The overall chief of the community indicated that: *"even giving a gift to your own child with your left hand indicates that you suspect the child not to be your own biological child."*

This same question was also directed to the purposively sampled left-handers in that community.

### ***What are the Cultural Customs and Traditional Underpinnings against you as a Left-hand user in your Community?***

The data revealed that the numbers of left-hand users in the community are few and they don't even constitute 10% of the population of the community. This backs up Bishop, Denny, and O'Sullivan's claims that left-handedness is a common occurrence affecting only about 10% of the population.<sup>75</sup> This 9:1 ratio of right to left-handers is widely cited. Michael opined that it does not appear generalizable to all populations.<sup>76</sup> The data also indicated the following as cultural customs and traditional underpinnings against them in that community: the left-hand user is still demonized as unlucky, evil, and clumsy, not only that, using the left hand is seen as disrespectful, unclean, and they are considered less intelligent than right-hand users. Exchanging money with a trader or elderly person with the left hand is considered disrespectful and rude. Also raising the left hand in class or pointing to an object with the left hand is considered 'unclean.'

The use of the lefthand is connected with bad manners because it is thought that it is only used to clean up after using the restroom. Left-handed children are sometimes beaten and tormented both at home. Left-handers also dare not to point their left hands at their father's house.

One of the male left-handers in an exclusive interview indicated that:

*"there is a general taboo on left-hand use: Giving, receiving, eating, and drinking with the left hand are considered rude by virtually all members of the community"*.

A woman who uses the left-hand for household chaos asserted that:

*"The community attributes 'Satan' to them and are only allowed to marry the chiefs or opinion leaders who are spiritually powerful. They also are mostly chastised by their husbands for using their left hands to cook and prepare the fire for cooking during funerals."*

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<sup>74</sup> Ogah, *Decision Making in the Research Process – Companion to Students and Researchers*.

<sup>75</sup> Dorothy Vera Margaret Bishop, *Handedness and Developmental Disorder*. (Hove, UK; Lawrence Erlbaum Associate Publishers, 2010); Kevin Denny and Vincent O'Sullivan, "The Economic Consequences of Being Left Handed: Some Sinister Results," *Journal of Human Resources*, 42, (2017): 353–374

<sup>76</sup> Michael Ferrari, "Cognitive Performance and Left-Handedness: Comparative Analyses in Adults with Seizures, Physical, Psychological and Learning Disorders in a Rehabilitation Setting." *The Journal of Rehabilitation*, 73, no.1, (2017).

Barlow opined that there are many negative connotations associated with being "left-handed": clumsy, awkward, unlucky, insincere, sinister, malicious, and so on and the result from the data confirms this assertion.<sup>77</sup>

### ***What are the Psychosocial factors that Affect you as a Left-hand user in the Community?***

This question was directed to only those who use left-hand and were purposively sampled. The findings revealed that left-handed persons find it difficult to use tools for routine chores, and are technologically disadvantaged in handling some household equipment. They are often times more worried about making mistakes and are more sensitive to criticism, quickly angered, and hence often punished. Writing also presents a range of challenges because they are unable to write like everybody. This leads to embarrassment. These views support Hackney's point that frequent reminders of being left-handed by society with comments such as *I didn't know you were left-handed. It's hard for me to show you because you're left-handed*, have frequently been heard by left-handed people since the world is more skewed to the right-hand world.<sup>78</sup>

### ***Are there any Religious Underpinnings or Discrimination against you as a Left-hander in the Community?***

Religion is a social-cultural system that connects mankind to supernatural, transcendental, and spiritual components through prescribed behaviour and practices, values, beliefs, worldviews, books, sanctified locations, prophecies, ethics, or organizations.<sup>79</sup> The findings revealed mixed feelings by respondents about religious biases and discrimination against the left-handed in the community. The respondents pointed out that some religions forbid left-handed persons to prepare some religious foods that are meant for sacrifices. The use of and handling of the Quran with the left hand is not allowed. Religious doctrines have had a major influence on the human rights of the left-hand user. Left-handers are seen as bad luck and impure to be allowed to handle some religious lessons, based on the belief that God gave the blessing to the right hand leaving out the left hand. There is also a belief that God has a favoured hand which is the right hand and a left-handed person is considered unlucky or even malicious.

These views from the data confirm James & Mandeville's assertion that there is no scholarly consensus over what precisely constitutes a religion.<sup>80</sup> Different religions may or may not contain various elements ranging from the divine sacred things, faith, a supernatural being or supernatural beings, or some sort of intimacy and transcendence that will provide norms and power for the rest of life.

The data also support Abdulla's findings which exalt the right hand in the Qur'an.<sup>81</sup> In both Islam and Hinduism, the right hand is generally reserved for honourable occupations such as food handling and ceremonial activities, while the left hand is specified for necessary but unclean purposes such as cleaning oneself after defecation. The use of the left hand for ceremonial purposes is therefore severely restricted and, in many religious Asian countries, the offering and acceptance of gifts are conducted exclusively with the right hand. In Buddhism, the right-hand fork in the path is the one that leads to Nirvana, while the left-hand fork is to be rejected.<sup>82</sup>

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<sup>77</sup> Barlow, *Casebook in Abnormal Psychology*.

<sup>78</sup> C.S. Hackney, Left-handed in a right-handed world. (2017) (Report No. CS 215824) Washington D.C.: Office of Educational Research and Improvement (ERIC Document Reproduction Service No. ED 406692).

<sup>79</sup> Vergote, *Religion, Belief and Unbelief. A Psychological Study*, 16.

<sup>80</sup> Paul James and Peter Mandaville, *Globalization and Culture*, Vol. 2: Globalizing Religions. (London: Sage Publications, 2018).

<sup>81</sup> Abdulla, "Culture, Religion, and Freedom of Religion or Belief." 102-115.

<sup>82</sup> Rik Smits, *The Puzzle of Left-Handedness* (London: Reaktion Books, 2017).

### ***What type of Physical Activity will you be Comfortable Participating in or Enjoying in the community as a Left-hand user?***

In a focus group discussion and through observation of left-handers, it was revealed that playing soccer, volleyball, handball and athletics farming, engaging in hunting and blacksmithing are the physical activities mostly done and enjoyed by left-hand members of the community. This result confirms the position of Davison et al. that being left-handed can be advantageous in certain physical activities.<sup>83</sup> Because opponents are not accustomed to their style of throwing the ball or punching, left-handed sportsmen perform better in sports. It implies that sportsmen with left-handed playing techniques have less time to adjust their game. This supports Chen et al assertion that left-handedness aids in the proper regulation of two parts of the brain since their brains are more symmetrical.<sup>84</sup> Thus, the control of movement and managing space while playing are controlled by the right side of the brain and these milliseconds really matter in fast-paced physical activities.

### ***Have Left-handers been forced to use their Right-hand in Everyday Activities instead of their Left hand by their Guardians?***

The data gathered from a focus group discussion revealed mixed reactions from the discussants. Majority of the discussants indicated that they could not remember since they started using their left hand in childhood. Others also stated that they were forced to change from the use of their left hand to their right hand by their parents and some teachers. These results partly confirm the results of another study conducted by Dada in Nigeria which indicated that 59.3% of children studied had been forced to convert from left-handedness to right-handedness by either parents or teachers.<sup>85</sup> One of the left-handers who were forced to change to right-hand use said, *"I was severely beaten and curses were rained on me by my parents for using my left hand in the household chores."*

## **SUMMARY OF THE DISCUSSION**

Culture and the use of left-hand does not only provide identity to people. It is also a tool that enabled the people to survive for generations amidst adverse conditions and circumstances. The recognition of the relationships of cultural underpinnings on the use of the left-hand was greatly identified in the study area. Chiefs, sub-chiefs, opinion leaders and left-handers in the Gbajong community attest to the fact that there are cultural underpinnings on the use of the left hand. The views of the respondents and the opinion leaders with regards to the use of the left-hand in the community is holistic.

## **RECOMMENDATIONS**

The study established that a few cultural underpinnings exist in the world for those who use left-hand. Efforts such as incorporating or recognizing the use of the left-hand as a special learning need ought to be given special consideration in line with other behavioural and physical impairments by teachers and parents. Religious leaders must also take pragmatic steps to understand and accept the behavioural traits of the left-hand user in society. Chiefs, sub-chiefs and opinion leaders should demonstrate a greater level of cultural tolerance towards them.

All individual differences need to be understood and factored into all cultural, traditional, religious and customary issues to ensure that human rights are respected. Because the vast majority of the population of the world is right-handed, many devices are designed for use by a right-handed person, which makes their use by left-handed people more difficult. Moreover, apart from inconvenience, left-handed people have historically been considered unlucky or even malicious for their difference by the right-handed majority.

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<sup>83</sup> Davison, et.al., "Genome-Wide Association Study of Handedness Excludes Simple Genetic Models."

<sup>84</sup> Chen et.al., "Factors Influencing Interest In Recreational Sports Participation and its Rural-Urban Disparity."

<sup>85</sup>Dada, Attitude toward Left-handedness as Perceived by Selected Secondary School. Students in Kogi State.

## CONCLUSIONS

The Convention for the Rights of the Child, Article 3 (1) reads in part — the best interests of the child shall be of primary consideration, it is the right of every child (left- or right-handed) to be treated fairly. The study has established that there are cultural and religious obstacles that exist in the world for left-handers and the Gbanjong community. Left-handedness should not be a limiting factor in the Gbanjong community's growth and development of culture, tradition, psychosocial, physical activities and customs.

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