



Psychosocial experiences of left-handed children: Phenomenological study

Sewalem Tsega Agegnehu ^{1*} , Rahel Gebre ²

¹ Addis Ababa University, ETHIOPIA

² Private NGO, ETHIOPIA

* Correspondence: sewalemtsega@yahoo.com

CITATION: Sewalem, T., & Rahel, G. (2024). Psychosocial experiences of left-handed children: Phenomenological study. *Educational Point*, 1(1), e106.

ARTICLE INFO

Received: 22 April 2024

Accepted: 23 July 2024

OPEN ACCESS

ABSTRACT

The study was intended to explore the psychosocial experiences of left-handed students in selected religious schools in Addis Ababa. A phenomenological qualitative research design was used to understand their experiences. An in-depth interview with sixteen left-handed students was conducted purposefully in four faith-based schools, and observation was employed and analyzed by Interpretive Phenomenological Analysis. The findings showed that left-handed children go through supportive and challenging experiences at home and in school settings. The supportive experiences were accepting, understanding, and encouraging left-handedness by various social members. However, the challenging experiences focus more on the repression of the left hand, and this repression is influenced by different religious and cultural beliefs, physical environment, and educational factors. These factors repress left-handers by ignoring their special needs, comparison with siblings, and forbidding performing different tasks using their left hand. Left-handed children also experience suggestions from different societies to practice using their right hands. Left-handed children were found to have particular experiences and feelings different from relatives and other societies. The study suggests that awareness raising about left-handedness and understanding of their unique experience and challenges helps to support left-handed children, among others, from bullying and teasing. Therefore, this study has implications for parents and the school community, educational training, and other initiatives that want to be involved, and the implications for further study were discussed.

Keywords: left-handedness, psychosocial experience, religious schools

BACKGROUND

Handedness or hand dominance is the human inclination to prefer one hand over the other to perform most tasks which is related to the dominant effect of functional asymmetry of brain hemispheres or internal brain function (Qo'ldoshev, 2021). This implies that handedness does not just refer to hand preference that appears to exist at some point in human development rather it is developed through brain and body interaction that began in the early stages of human development. This was supported by the study done on unborn babies,

which revealed 92% of fetuses in the mother's womb suck their right thumb, similar to the prevalence of right-handedness in general (Lalumière, 2000). Nevertheless, what does the remaining 8% explain regarding handedness? As global statistical data shows, 90% of humans are right-handed, 10%-12% are left-handed, and only 1% ambidextrous; those using both hands equally well (McManus, 2002). This indicates that there are three hand preferences with respective prevalence rates. However, the prevalence rate varies within the context of culture, geography, gender, chronological time, etc. (Llaurens et al., 2009).

Despite handedness classified with prevalence rate respectively, right-handedness is considered as default handedness in various studies, while another hand preference exists as a factor. However, there are studies being done on left-handedness as one category of handedness. Based on these studies, it is able to understand the uniqueness, cause, character traits, limitations, challenges, and experiences of the left-handed population (Faurie et al., 2010; Qo'ldoshev, 2021). As defined by Meyer (as cited by Masud & Ajmal, 2012), left-handedness is asymmetry of the brain's right hemisphere towards the left side of the body that results in dominance of the left hand to perform tasks that need strength and coordination. This brain and hand interaction is not limited to merely hand preference but a base for the peculiarity of left-handers that are influenced by the cause and other internal and external factors.

Even though knowing the cause of left-handedness supports the study of left-handedness, while there was no single explanation that resulted in left-handedness, it falls within four factors. Genetic, pathological, dysfunctional, and social factors (Llaurens et al., 2009; Malusi et al., 2015; Qo'ldoshev, 2021). Genetic factors are described as specific genes on 40 loci that determine the development of left-handedness, and based on this gene, 25% of hereditary from parents or family relatives contribute to left-handedness. Pathological developmental factors include uterus environment, pathological problems, and instability in early and later fetal development that result in pathological left-handedness. Similarly, dysfunctional left-handedness results from injury or fracture of the right hand. Social factors cause social left-handedness through social comfortability, like an imitation of left-handed society members in using their left hand and adopting it as a hand preference (Llaurens et al., 2009; Qo'ldoshev, 2021).

Left-handedness is highly influenced by genetic and pathological factors internally and dysfunctional and social factors externally. While the internal factor brought unique character and behavior attached to left-handedness, it is undeniable that the external factors influence hand preference. Social factors, including societal perception, norms, values, culture, and religious belief, the geographical area plays an important role in the perception and prevalence of left-handedness and affects the development and everyday activity of the left-handed population (Galobardes et al., 1999; Qo'ldoshev, 2021). Some cultures and religious beliefs recognize left-handedness as honored, artistic, skillful, smart, and wise and use the well-known left-handed populations to support their argument (Alhassan, 2017). While other cultures consider left-handedness as a pathological problem, witchcraft, negative, evil, or bad, which results from social pressure that obligates conversion of hand preference as permanent impact (Masud & Ajmal, 2012). These two standpoints are immersed within different social cultures across the world, and they influence the experience of the left-handed population.

Left-handed population in various societies around the world experience diversity because of cultural beliefs and social perspectives towards left-handedness. There is a higher frequency of left-handers in Western countries for loosening cultural pressure towards left-handedness compared to former times, while Eastern countries like Japan and India have higher cultural resistance towards left-handedness, and this restricts left-handers from using their left hand to eat and write (Malusi et al., 2015). In most African cultures, it is rude, forbidden, and unacceptable to perform different tasks using left hand (Alhassan, 2017). Wieschhoff explains (as cited by Alhassan, 2017) that some African tribes use boiled water on earth holes and put child left to 'cure left-handedness'. Similarly, in Ethiopian cultural, etiquette, receiving or giving gifts and eating with left hand is considered disrespectful and not formal (Commisceo Global Consulting Ltd., 2020). The collective studies

explain left-hand eating and writing are the major tasks discouraged, and left-handed face discrimination in most cultures worldwide (Alhassan, 2017; Llaurens et al., 2009).

Based on the law, left-handedness is one of the defects that eliminate from being a priest (Alhassan, 2017). Despite cultural and religious differences, the pressure of most cultures and religion on left-handedness is higher in females than male left-handers which results in the prevalence of left hander among females is lower than males (Lalumière et al., 2000; Manungo, 2020). Even though left-handedness is a sole uniqueness, these external factors and the internal factors result in diverse left-handers with unique psychosocial experience (Masud & Ajmal, 2012; Manungo, 2020; Suyu-Tattao, 2016).

Even though all left-handed populations are not a homogeneous group, based on the studies done by comparing left-handed individuals to right-handed shows different characteristics concerning cognitive, emotional and physical domain (Qo'ldoshev, 2020). In emotional domain, left-handed shows emotional fluctuation that displayed in their calmness, timid, hard to involve in social gathering or large gathering, being introvert, slow in adopting normal behavior, impatient with external distraction (ibid). In the cognitive domain left-handed people show a different analytical style in processing information, slow in comprehending data and tend to focus on the detail part of provided information and process without distraction. In physical domain left-handed people coordinate left body part (eye, leg, hand, ear) and they have athletics competency in different sport nevertheless, there are some limitations on motor coordination with different part of body (Fisher, 2006; Qo'ldoshev, 2020; Qo'ldoshev, 2021). These make the left-handed population unique in the right-handed world.

On the other hand, the social experience of the left-handed population embraces both supportive and challenging experiences. Appreciation of uniqueness and guidance are external support for left-handers' develop positive perspective towards their left-handedness (Masud & Ajmal, 2012). However, Masud and Ajmal (2012) explain the experience of left handers is influenced by external challenges, including suppression, oppression, and discrimination which results in a permanent negative impact on left-handedness. In a previous study, the number of left-handers with age is related to low life expectancy rate, for the cause of diseases, pathological and psychological problems related to being left-handed (Webb, et al., 2013), however there is no certain pathological explanation. On the contrary, Galobardes et al. (1999) study found the declining prevalence rate of left-handedness in adults than in the younger generation is explained by hand conversion of the innate left-handed population as a primary challenge. These challenges are influenced by social and parental pressure and adopting the system of living in the right-handed world as left-handed people. This multi-dimensional pressure emerges at the early age of childhood and passes through schooling, which results in lifelong impacts (Qo'ldoshev, 2020).

Childhood is a stage of human development where left-handedness is recognized, even though there is no single reference of age for stable hand preference in children, some home activities and schooling expose them to different tasks that require hand dominance (Department of Occupational Therapy, 2005; Qo'ldoshev, 2020). Left-handedness exposes left-handed children to different psychosocial experiences in both home and school settings. These psychosocial experience in general embrace interaction with right-handed physical environment which including tools, equipment, facilities that demand great effort to be effective (Suyu-Tattao, 2016), similarly left-handedness as peculiarity influence left-handed children behavior and interaction with other social groups (Masud & Ajmal, 2012; Qo'ldoshev, 2021). Malusi et al. (2015) explains handedness and individual experience require extra effort to be competent and to fit in creativity, sport and music activities. Meng (2007) discussed left-handed children experiencing external support especially from left-handed relatives, as well as challenges, discrimination and suppression from family and social groups (Masud & Ajmal, 2012), these challenges extended to hand conversion experience that resulted in stuttering, unnecessary pressure on motor coordination (Kushner, 2011; Meng, 2007).

Psychological aspect is studied in school setting by comparing left-handed children to right-handed peers in school settings. According to Faurie et al. (2010) study, school performance and leadership skills concerning left-handedness, shows a weak association even though the result varies with sex. This explains that left-handedness is not a homogenous group (Faurie et al., 2010). However as per the study of Qo'ldoshev (2021) left-handed children show common behavior including creative, emotional, slow learning normal behavior, lack of self-confidence or courage, low focus which reduces efficiency and increases exhaustion, low school competency and difficulty in group work. But it is still arguable that these referred behaviors of left-handedness are inherited from being left-handed or resulted from social influence and challenges. These psychological challenging experiences result in shame, fatigue, abuse and the experience of abnormality and inadequacy within left-handed school children (Fisher, 2006).

Similarly, left-handed children's social experience contains support from relatives and social members by relating left-handedness as gifted and talented with needed guidance they can reach their full potential (Manungo, 2020). While challenging experience includes social stigma and peer bullying that result in low socialization to left-handed children (Masud & Ajmal, 2012). Physical environment and its effect on school performance compared to right-handed children explain their uniqueness and limitations and performing activities that need body coordination require special attention (Malusi et al., 2015). Similarly, school sitting arrangement and tools influence the experience of left-handed children (Qo'ldoshev, 2020).

Despite these kind sparse studies were done on left-handedness in different parts of the world and African countries, nevertheless the psychosocial aspect of left-handedness has not been dealt with specifically in the Ethiopian context. Therefore, there is a need to explore to understand the psychosocial experience of left-handers and the influence of social aspects towards left-handedness in Ethiopia context for Ethiopia has the affluent cultural and religious values that influence human development in general.

General Objective

The general objective of this study is to explore the psychosocial experience of left-handed school children with the age range 8-12.

METHODS

The research explores the experience of left-handers in contextualized way, therefore qualitative examination was employed (Creswell, 2009). This study employs a phenomenological method to understand the lived experiences of left-handed children (Willig, 2001).

Sample

Purposive sampling techniques were employed in this study to acquire rich information about the experience of left-handedness. First selecting four faith-based schools from each religious denomination based on their cooperation. Within each faith-based school, the sample of left-handed students from 8-12 age groups was selected by criterion sampling, which is hand preference to perform a given activity and using the left hand for the majority of activities. This study used sixteen left-handed students as a sample for gaining rich data about left-handed children's experiences.

Procedure

After selecting four religious schools from each religious denomination, this study used sixteen left-handed students as a sample to collect data. After the orientation given regarding the data collection procedure, participants in this study were required to give their parents the consent form to be signed. In-depth interviews

and observations were used for data collection. The semi-structured interview allowed the interviewers to be flexible in probing interesting areas which emerged in the interview. During the time of semi-structured interview, both pen and paper and audio records were used to record the data on the basis of participant permission.

DATA ANALYSIS

Data collected by the semi-structured interview guide were analyzed using Interpretive Phenomenological Analysis (IPA), to develop rich description about the experiences of left-handed children. There were four major steps used to analyze the phenomenological findings (Willig, 2001). These are: *Analyze individual cases and code* – after reading and rereading each transcribed response of the left-handed children, each response was coded. *Label themes* – emerge themes from the coded response to capture meaning. *Structure and clusters of themes* – the themes categorized into cluster of themes and this cluster of themes has themes and sub-themes. *Summary table of structured themes* – after clustering, the summary table was developed to capture the experience of left-handed children. Then the findings were written in narrative using themes and significant statements that describe the experiences.

RESULTS

Demography

Among the 16 participants, 8 of them were females and 8 of them were males. The participants are between the age of 8 to 12 and with educational level from grade 2 to grade 5. Among the 16 left-handed student who participated in this study 7 of them are study in Kidus Michael Cathedral school which is Orthodox Christian denomination, 3 of them are study in Dom Bosco Catholic school which is categorized in Catholic Christian denomination, while 2 of them study in Mekanisa Abader school in the category of Muslim denomination and 4 of them Mekanisa Mekane Eyesus school that is in protestant denomination.

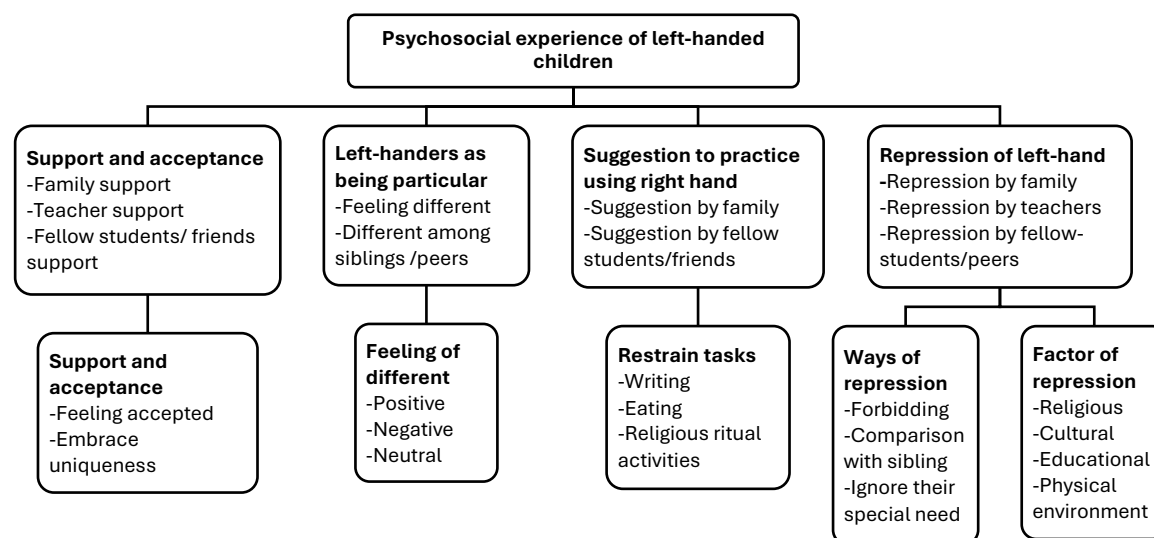


Figure 1. Comprehensive model of themes and sub-themes of psychosocial experience of left-handed children (Source: Authors)

Psychosocial Experience of Left-handed Children

Based on collected data through in-depth interview the finding of this study gave comprehensive way of explaining psychosocial experience of left-handed children based on the data themes and sub-themes emerged. The psychosocial experience of left-handed children forms four major themes. In the finding left-handed children share their psychosocial experience; support from different social members, they also share their unique experience because of their left-handedness, different social members' suggestion to use right hand and repression of left hand by different social members and the cultural and belief behind it.

Support and Acceptance of Left-hand

The experience is unique to all left-handed participants in the home and school setting. There are different social members that contribute to this unique experience of left-handed children. Social members including some family, teachers and fellow students accept and support children left-handedness.

Family support of left-hand

Most participant family members, mainly parents and siblings, know and accept participant left-handedness. However, only some family members support their children left-handedness and encourage them to use their left-hand for performing different tasks. Family members including parents and siblings help and offer extra push to help left-handers to cope up in a right-handed environment which includes using their left hand to eat, write, using different tools and identifying alphabet letters.

Left-hander 2 described the experience as:

my left-handedness reinforced by family members, especially my mother assisted my left-handedness and she give a technical guidance how to hold a pen and teach me to identify words. I believe that helped me in writing and identifying both English and Amharic alphabets. All my family members were neutral about my left-handedness; I was treated equally with my siblings by taking into consideration that I sometimes need special treatment because of my left-handedness. (Interview, June 24/2022)

Similarly, **Left-hander 3** describes her experience at home as:

from my family member I am the only left-handed child. My family always wondered from where I got my left-handedness and they always said, "from whom did she inherit her left-handedness?" Most of my family members accept my left-handedness and suggest exercising using both hands.

She also added that, she got appreciation from family member because of her left-handedness:

I have also different handwriting from my family, and they said, "it is because she is left-handed, her handwriting is beautiful". I am also talented in art, especially in drawing and that makes me unique from other family members. (Left-handed 3, interview, June 24/2022)

Having other left-handed family members in a home setting benefits left-handers experience through encouragement and guidance. For instance, left-hander 12 explained that because his father is also left-handed, he supports and understands his challenges and shows him some technique. Left-hander 4 also explains that he experiences encouragement to practice using left hand from his father. Similarly, left-hander 15 explains the support and appreciation experience with his family especially his older brother while he used his left hand to perform various tasks, because his brother also used his left hand to write.

Teachers support of left-hand

Some left-handed students experience the teacher's support and appreciation of their left-handedness and provide special treatment and care for their special needs. Left-hander 4 described that most of the teachers in their class know his left-handedness and the teachers said it's innate; so, accept the uniqueness and try to cope with the school environment. In addition, left-hander 6 explains that all teachers know about his left-handedness, and they supported him by arranging sitting side because if he didn't have proper sitting side, he gets uncomfortable and the teacher notices.

While other teachers show their concern about left-handed student comfortability and in what way they manage to perform different activities, for instance writing, drawing etc.

Left-hander 7 describes the experience in relation to teachers as:

previously the teacher gave me hard time by ordering me to do some tasks including writing and drawing by using right hand. But now some of my teachers know that I am left-hand, and it has connection with my dysfunctional right hand. Consequently, they accepted my condition and now the teachers are concerned about my comfortability. (Interview, June 22/2022)

Similarly, **Left-hander 9** explains the experience at school as:

my school Teachers knew that I am left-handed. And when they saw me challenged in coping to use material and desk in writing and drawing, they showed their concern about my comfortability and tried to help by changing my sitting arrangement. (Interview, June 22/2022)

Fellow students support left-hand

Some participants respond they experience a supportive environment of friends and classmates towards their left-handedness for instance left-handers 5, 8, 10 and 11 explain their close friends support their left-handedness. Additionally, left-hander 8 stated that his friends know his left-handedness and encourage him. Also his friends ask him how they can support him to easier the challenges.

Similarly, **Left-hander 5** explained about his friends as:

Most of my friends did not know that I am left-handed, but some of my friends knew that I am left-handed and they supported and encouraged me to practice using both hands and gave me left side sitting place for me to be comfortable when I write. (Left-hander 5, interview, June 23/2022)

The participant explained that some friends brought positive stereotypical thoughts towards left-handedness and they reflected on left-handed students.

Left-hander 1 shared his friends' perspective towards left-handed people as:

some of my friends saw me as smart and talented kid in classroom. I remember one of my friends said "you are brilliant because you are left-handed". It is because there is some stereotypical thought that explain left-handed people as "left-handed are bright minded". (Interview, June 24/2022)

Similarly, **Left-hander 13** explained her friends thought as:

Some of my friends supported my left-handedness but some says "it's proper to use right hand". Some of my friends supported my left-handedness because they believed that left-handed people are genius in Math and creative in art. (Interview, June 21/2022)

The support and acceptance of left-handedness by social members help the left-handed children to embrace their uniqueness and feel accepted by different social members.

Left-hander 2 explained that:

my mother, some school teacher and close friends supported and encouraged my left-handedness that made me feel accepted and embrace my uniqueness throughout my experience, despite there being different challenges I faced every day because of my left-handedness. (Interview, June 24/2022)

Left-handers as Being Particular

Left-handedness distinguishes left-handed population as unique and different in a way, for the majority of handedness are categorized as right-handed population. Based on the finding this uniqueness brought various feeling to left-handed individuals that is caused by both internal and external influences. The feeling ensued the belief, value and thought of left-handedness.

Left-handers in this study reflect a variety of feelings about their left-handedness in different ways.

Positive feeling of being left-handed

Some of the participants express their positive feeling and distinctiveness for being left-handed. These positive feelings mentioned in the finding includes feeling of uniqueness, happy, proud, feeling different, advantageous etc. These feelings were expressed by some left-handed children in this study including **Left-hander 4** who expressed his feeling for he was different from others, as he was happy for being different and unique because of his left-handedness. Similarly, left-hander 1 explained that he was happy and felt special for being left-handed because he knew that left-handed people are rare and he is one of them.

Left-hander 3 also described his feeling as:

My uniqueness concerning to left-handedness makes me feels happy. I heard that left-handed people have special artistic talent, therefore I consider myself as a special person. Also my handwriting is beautiful and people comment that it is because of my left-handedness. (Interview, June 24/2022)

Similarly, **Left-hander 2** explained that:

being left-handed makes me feel proud, because when I was little child I heard one program about left-handedness on the radio it says that left-handers uses both their brain especially in the case of boys. And it continues that, if a person uses both side of their brain, they are though as smart and more talented. I think that is why I consider myself as a talented person in art, especially in literature. I also feel that I am advantageous because when the teacher punishes our right hand, even though it's painful since I use my left-hand to write. (Interview, June 24/2022)

Negative feeling of being left-handed

While others left-hander participants explain the negative feeling they experience as a result of their left-handedness. For some, this feeling resulted from internal and external pressure like social influence that rose from the religious and cultural value that left-handedness has. These negative feelings stated in this finding include feeling of isolation, sadness, vulnerable. These feelings expressed by some left-handed children in this study, for instance left-hander 14 explain that she felt vulnerable, because her mother told her not to write with her left hand by saying “your handwriting will be ugly”.

Left-hander 5 also described the feeling of his left-handedness as:

my left-handedness makes me feel different from other children. I always wonder ‘why am I writing using left-handed? Does this mean I have something wrong with my hand or how it is coordinated with my mind?’ while everyone uses their right hand to perform tasks. (Interview, June 23/2022).

Similarly, **Left-hander 10** explained the feeling as:

I have both feeling of happiness and sadness for being left-handed. I am happy because I know I am unique than most of my friends. But I felt sad especially when I am eating with my left hand; I believe that Michael the angle will be sad seeing me using my left hand to eat. (Interview, June 22/2022)

Neutral feeling of being left-handed

Others remaining left-handers explained that their feeling is neutral towards being left-handed both in school and home setting. One respondent explained that he feels the same as other right-handed students and there is no unique feeling that he feels because of his left-handedness in both home and school settings.

Additionally, **Left-handed 16** also responded that:

I felt neutral about my left-handedness; because I understand it is just a hand preference in doing different activities. My parents also have similar thoughts about my left-handedness. Therefore, I feel normal as right-handed friends feel about their handedness. (Left-handed 16, interview, June 21/2022)

Suggestion to Practice Using Right Hand

Some participants experienced parents or other family members’ recommendation and influence on practice using the right hand for various reasons. One participant explained; “*even though her father forbidden her to eat using left hand and suggest to practice her right hand for performing other tasks, her father accept her left-handedness*” (Left-hander 13, interview, June 21/2022).

Left-hander 14 explained about her experience of left-handedness in home setting as:

My mother told me not to write with my left hand for “your handwriting will be ugly”. My sister also left-hander while performing various activities but our mother insisted to train me and my sister to use our right hand while writing. Even though my sister accepts my left-handwriting, she said “don’t get used to write with your left hand because it will be a challenge for you in the future”. Additionally, my mother pushed me to use right hand while eating food. (Interview, June 21/2022)

Even though some left-handed students’ friends support performing using left hand, they also recommend their left-handed friend to practicing with right hand. **Left-hander 10** describe her situation as:

I am the only left-handed from my group of friends in school. And some of my friends supported and understand my left-handedness, but other friends said that it’s not appropriate using left hand and I should practice using my right hand for performing different activities. (Left-hander 10, Interview, June 21/2022)

Repression of Left-hand

Repression by different society members

Based on the findings, left-handed children share their repression experience by different social members including family members, teachers, other school community, peers and fellow students. This repression of left-hand influenced by religious and cultural belief and norms, physical environment restrains etc. towards left-handedness.

All of the participant experience external pressure at least one time regarding using their right hand while eating food by family members or close relatives. **Left-hander 9** explained that her grandmother restricted her from using left hand to eat without giving a specific reason.

Left-hander 10 also explained that:

most of my family member disapprove my left-handedness and encourage me to change my left hand to right hand. And they help me to practice using my right hand to perform various activities, especially when I eat and writing. (Interview, June 21/2022)

Similarly, in schools, left-handed children experience repression by schoolteachers. One left-handed student explains his undesirable experience in relation to schoolteachers since he was a little child, the teacher's reaction to his left-handedness. As per his response the teacher made him go through a negative experience:

When I was in kindergarten, I was the only left-handed student in our class. Because of the way I hold pen when I write, my teacher told students to laugh and joke on me but through practice I learn how to hold pen properly. When I was grade student the teachers said to my parents that "he has slow handwriting so we are afraid that he will fail in class, so we want to expel him from this school before he fails". But I never failed, in fact I got good grade therefore I stayed in that school. But now teachers and friends support and appreciate my left-handedness. (Left-handed 2, interview, June 24/2022).

Some left-handed student highlighted that, there are some friends and classmates that negatively perceived left-handedness and negatively influence experience of left-handed students.

Left-hander 3 describes that:

In normal class we sit for three in one school desk. Most of my friends didn't know that I am left-handed. I was sad when I heard a friend that knows my left-handedness told me that her grandmother explained that the left hand belongs to the devil "setan". (Interview, June 24/2022)

Similarly, other left-handed students had negative experience include discrimination and bullying by other students and friends around them because of their left-handedness. For left-hander 4 his repression experience by his friends was expressed by bullying and making fun of his left-handedness. Similarly, Left-handers 6, 7 and 9 share their bullying experience as:

Left-hander 6 explained that:

Most of the friends didn't know that I am left-handed. Only some of my friends and the students who sit with me knows that I am left-handed when complain about my elbow placing and they said "don't touch me" and I said "I am sorry". (Interview, June 22/2022)

Similarly, **Left-hander 7** describe as:

Some of the girl students understand my left-handedness but most of boys in our class make fun of me and bullying me by saying “don’t touch me you are left-handed” as bad thing will happen, if I touch them. In different group work, the student groups themselves without including me (they eliminate me from group work).

I always think that if I were right-hander my friends will not avoid me from different group work.
(Left-hander 7, interview, June 22/2022)

Left-hander 9 described her friend’s reaction as:

My friends know about my left-handedness, and some of them joke about my left-handedness and they wonder how I can do different activities. Also when I play football with my friends and kick the ball with my left-foot they said “you have two left leg”. (Interview, June 22/2022).

There are also other communities in the school setting that are mentioned by participants of this study; school guards, religious representatives that repress the experience of left-handed students. One respondent explains her experience as:

Our school guard oversees student while they are in dining hall and punish us if we use our left-hand for eating and say it’s forbidden to eat with left hand. Once the school guard found me eating with my left hand and he beat my left hand to stop. (Left-hander 11, interview, June 21/2022)

Interaction with physical environment as repression factor

Participants explain about their left-handedness and the interaction with physical environment, as it starts when they were little to practice using and implementing different tools like scissors, tie shoe, and zip cloth, using spoon and toothbrush. Therefore, most participant explain that they are having difficulty in adopting right-handed tools and that need more practice to equips them in adaptation of the physical environment. **Left-hander 3** explained about the interaction with physical environment as:

I adopt using different tools including spoon and toothbrush since I was little child. Therefore, now it’s no longer a challenge using my left hand to various right-handed tools. (Left-hander 3, interview, June 24/2022)

Some of the physical settings the left-handed children in this study experience in school settings were desk, armchair, mouse and computer keyboard, scissors and different tools for wood work. All school materials and furniture were made by taking only right-handed people into consideration, this challenge left-handed people who use it. And they need more practice to adapt the material and furniture.

Left-hander 3 explained her interaction with school physical environment as:

Most of the teachers that teach in our class didn’t know my left-handedness. Most of the time the teacher treats me similar to right-handed students. When I sit in the armchair in a normal class and to take exams, I get uncomfortable. Then one time when I sit on armchair to take exam, the teacher thought that I want to cheat, because I turn to my left.

She continued describing about materials and tools as:

Even though it took me more time to practice I adopt using tools like scissors, holding pen properly. Therefore, now it’s not that much hard to use different tools and materials”. (Interview, June 24/2022)

Likewise, **Left-hander 1** described adopting the physical environment as:

I was having a hard time using my right-handed mouse and using the computer keyboard in our computer class, it demands me to practice more. And there are times when the teacher gave group assignments and when we worked on a school project, it was hard using right-handed tools for woodwork. (Interview, June 24/2022)

Religious and cultural factors

There are religious and cultural beliefs and values in relation to left-handedness in this context. This explained by the repression of left-hand in performing different tasks. Based on the finding there are some tasks that must be performed by using the right hand; eating food, hand shaking, writing and performing religious ritual activities are some of the tasks.

Left-hander13 explained she is told by an elder at home that it is forbidden to eat and handshake using the left hand in our culture without any specific reason attached to it. Similarly, **Left-hander 14** God mother saw her when she wrote with her left hand, and she told to her mother to train her child to use right hand for writing because it's not appropriate to use left hand without giving a clear reason.

Some of the participant explained religious belief and teaching behind left-handedness and performing tasks in a contextual way. **Left-hander 7** explained the religious belief in orthodox religion as:

My parents give a reason that has bases on orthodox religion. It commands "it is forbidden to use left hand while eating food". Therefore, my father encourages me to use right hand while eating. (Left-handed 7, interview, June 22/2022)

Left-hander 4 also described his experience and Muslim religious reasons behind left-handedness as:

Most of my families accept my left-handedness except that they suggest using my right hand while eating. Especially my uncle saw me and said, "in our religion it's not acceptable to use your left hand to eat it is not "Sunna". Because I do not know the difference, I continued eating with my left hand and my uncle saw me and threw his shoes on me, after that I didn't eat food for all day long. Until now I hold a grudge on him.

The reason behind 'not using left hand to eat is religious teaching that order it's 'not Sunna' or forbidden using left hand for different activities, especially eating because people use left-hand to do toilet and defect cleaning activities. (Interview, June 23/2022)

Moreover, only one participant explained that religious representative in their school, who teaches religious moral ordered left-handed students to eat using right hand and to use right hand finger to pray by doing cross sign "mamateb" (Left-handed 10, interview, June 21/2022).

Comparison with sibling

Concerning comparison of left-handers with their siblings, most left-handed participants who have sibling at home also explain that they are treated equally with their siblings; there is no special treatment attached to their left-handedness. However, some left-handed children experience comparison with their siblings. **Left-hander 4** describes that his uncle compares him with his siblings and always discourages him for his left-handedness. Similarly, **Left-hander 7** expressed her experience in comparison with her siblings as:

Some of my family members compared me with my right-handed siblings. For instance, when we as a family went to some public places, I needed a specific sitting spot otherwise I am uncomfortable in sitting. When we went to restaurant, I only can sit in chair which placed around

corner but most of my family didn't understand my special need regarding this situation. (Left-hander 7, interview, June 22/2022)

For some left-handed participant not getting special treatment is an opportunity to show their capacity by thriving to cope with other right-hander (Left-hander 1, interview, June 22/2022), while for others not getting special treatment hinder the left-hander from performing their best potential (Left-hander 7, interview, June 22/2022).

Neglect left-handers' special needs

On the other hand, the children's left-handedness is not taken as uniqueness that need special attention. In this finding the participants mentioned their experience with some teachers that know their student left-handedness, but not provide special attention or support to their left-handedness. **Left-hander 1** explained this experience as:

Most of the teachers know that I am left-handed and there is no unique attention given to me for being left-handed. That makes me feel equal with other students and help me to be competent. (Left-hander 1, interview, June 24/2022).

Left-hander 5 also described that:

Most of the teachers don't know that I am left-handed, but some teachers know and they said practice using right hand in performing different tasks especially writing without providing me any technical guidance. For the teacher didn't want the extra effort they should put to support left-handedness. (Interview, June 23/2022)

Similarly, **Left-hander 11** stated her experience in relation to teacher as:

My math teacher orders me to write with right hand, and other teacher recommended to modify my handwriting. Even though I have good handwriting, it's small in size because I am confined while I write, for the desk space is not enough for three students, especially if left-handed sit with right-handed students. (Interview, June 21/2022)

Left-hander 3 explained that:

in our school most of the teachers didn't know about my left-handedness. Most of the time the teacher treats me similar to right-handed students. When I sit in the armchair to a normal class and to take an exam, I get uncomfortable. I remember one time when I sat in an armchair to take an exam, the teacher asked me if I was left-handed because he didn't know before that. (Interview, June 24/2022).

DISCUSSION

The main aim of this study is to explore the psychosocial experience of left-handed school children with the age range 8-12.

Day to day experience of left-handed children is unique, for it influenced by individual and contextual factors. Finding of this study indicate that the experience of left-handed children influenced by cumulative physical environment, social interaction, perspective by cultural and religious belief contributed to the experience of each left-handed individual.

Perception and belief of left-handedness is grounded by the interaction with parents, siblings, family and relatives at home setting. Some family members support and encourage children left-handedness by

accepting their uniqueness. Especially family members who are left-handed as their children are better in assisting left-handers everyday experience. Correspondingly, Manungo (2020) explain that even though family members that encourage left-handers are few in number, they as supporting system help their left-handers by allowing them perform activities with their left hands and appreciate their effort in coping with the environment. This experience is more prevailing for family members who share this peculiarity with left-handed children. This goes in line with **Left-hander 2** who explained that:

my mother, some schoolteacher and close friends supported and encouraged my left-handedness that made me feel accepted and embrace my uniqueness throughout my experience.

Left-handers interaction with school environment that consists teachers, peers and other school communities brought unique experience in school setting. It was found that the teachers got limited awareness about student left-handedness and respond to the experience accordingly. There are supportive and appreciative response to left-handed children by teachers, while the concern about the comfortability of left-handed doing different activities attached to it. Similarly, Masud and Ajmal (2012) explain that there are some supportive teachers and school communities within the school setting that allow left-handed students to use their dominant hand to perform some activities. This make left-handers school experience encouraging which is similar to **Left-hander 1** who explained this experience as:

Most of the teachers know that I am left- handed and there is no unique attention given to me for being left-handed. That makes me feel equal to other students and helps me to be competent.

Similarly, left-handed children passed through different experiences growing up and the external and internal pressure influence how they feel about their left-handedness. Left-handed children experience various feeling including positive, negative and neutral feelings about their left-handedness. The positive feeling of some left-handed children raised from the belief of their distinctiveness, uniqueness and with special talent. Similarly, Suyu-Tatta0 (2016) states that left-handed people only express their positive feelings about their left-handedness, because they know they are unique from others, they are fewer in number and for having unique talents and creativity in art. In contrast with previous study, left-handed children also experienced other negative and neutral feelings concerning their peculiarity. Negative feelings rose from beliefs and stigma related external pressure. While few left-handed children express their neutral feelings which is no unique or different feeling experienced because of their left-handedness.

The majority of homes are considered as one of the sources of repression that is influenced by belief attached to left-handedness. Suppression of left-handedness is a forceful external influence on left-handers that varies from not using the left hand for some activities, including eating and writing, to the extent of not using the left hand to perform all tasks (Masud & Ajmal, 2012). In this research, parents and family, relatives discourage and suppress left-handers' experiences that restrain left-handed children from using their left hand to perform various tasks, and left-handers are restrictedly forbidden to use their left hand for eating and writing (e.g. **Left-handers 5, 14**). Harsh words, physical punishment and tying their dominant hands are some of corrective ways family and relatives use to discourage left-handedness.

Similarly, oppression by a teacher is experienced by left-handed students, this is to the extent of pressuring left-handed people to convert dominant hand to right hand (Masud & Ajmal, 2012; Suyu-Tatta0, 2016) which could be due to lack of awareness. The finding further explained that teachers implement teaching and writing methodology that only suits right-handed students. The current finding supports previous study, teachers and other school community were found unaware of the special need of left-handedness and pressure them to convert left hand to right hand for writing and eating.

Additionally, school peer students as part of school community also wonder about their left-handedness, when they observe left-handed people doing different activities like writing using their left hand (Masud &

Ajmal, 2012). Similarly, in current study fellow students are curious about the distinctiveness of left-handers. Contrary, stereotypical thoughts of left-handedness as smart, talented and bullying that discouraged left-handedness is reflected in this study like the study in Auwalu et al. (2022) which stated with regards to intelligence and creativity, 74.38% generally believed that left handers are more intelligent and creative than right handers. Similarly, Gigante (2023) that stated indeed, left-handed folks today are widely regarded as more creative and, in some circles, cleverer than their right-handed peers which could be understood by the belief that is held on left-handedness within this context.

The left-handers are also compared with right-handed siblings, to the extent where elder family members allow younger and older siblings to correct left-handedness for it is considered as a defect (Masud & Ajmal, 2012). The finding of this study uncovers the comparison experience of left-handed children by family members, close relative and other social members. Society compares left-handed children with right handers, for right-handed siblings do better in specific activities or proper interaction with right-handed physical environment relates with this idea.

Regarding the experience of left-handed student interaction with physical environment in school setting, it was found that left-handed students get to use computer mouse, scissors, woodwork tools, armchairs and chairs. Most of the tools are made for right-handed students, therefore the left-handed children need more practice to adapt the tools and furniture. Suyu-Tattao (2016) shares that left-handed interaction with the school physical environment includes school chairs and armchairs, scissors, pens, computer mouse, rulers. Similar to the current study for most tools and school furniture are made in consideration of the right-handed population, left-handed people should have to put more effort in practicing and performing simple tasks.

Implications

This study recommended providing awareness towards left-handedness. Left-handedness has been influenced negatively by different social members, because of that left-handed suffer from social repression. Based on the finding beside social influence left-handed children are challenged by physical environments and their uniqueness. Therefore, there is a need of awareness platform to all social groups includes knowledge and understanding about left-handedness which will help in minimizing social pressure associated with left-handedness and it enhance positive perspective that improve social interaction. Courageous responses from the community towards left-handedness help to minimize social influence that they are facing and impact left-handed children's well-being. Through given awareness different social members engage in supporting left-handers and make their everyday experience easier.

Additionally, the study has an implication for educational training. Left-handed students are similar to other students who just need special attention because most of their environment is in favor of right-handed students. Therefore, this study would be helpful to educational training providers to consider and facilitate the special need of left-handed students throughout the nation. This educational training must support left-handed students and school community especially teachers about the special needs of left-handedness and how teachers serve the need of left-handers in better way. Moreover, inclusive educational policies need revision and practice in schools by integrating left-handed students to address their special needs regarding school furniture, tools etc. Which include ongoing awareness training to different school community that influence perception about left-handed students and how they can treat left-handers' uniqueness in school environment.

This study finding can also serve as a foundation for further studies in this area. The current study finding addresses only limited questions regarding left-handed children and there are more issues about left-handers that cannot be addressed with this study for instance, cultural and religious belief towards left-handedness, how this belief influence left-handedness, the long-term impact of psychosocial influence etc. Therefore,

interested researchers in this area should continually explore left-handedness. Research both on a larger scale and in-depth studies are required to better understand the uniqueness of left-handed people.

This study has implication for other Initiatives that want to involve in supporting left-handed members of the community. There is a need for collaboration towards left-handers and in supporting their needs. This includes school furniture and tools manufacturing companies that need to embrace the demand of left-handers on their products. Similarly, educational, developmental, clinical and social psychologists understand the psychology of persons and left-handed children as part of it. Therefore, this study can be useful resource to these professionals that can support in providing awareness and a supportive environment.

Professional practitioners who provide training to left-handed people help to cope with the challenges and develop resilience. Left-handers in this study deal with a range of psychosocial challenging experiences. Therefore, it is helpful to prepare left-handers' mindset by providing insightful information about what they will face in the world. The training service should be provided to the left-handers and their interaction with different social groups.

Limitations

Due to financial and time constraints, the study is limited to a few schools in Addis Ababa. The limited literature on the issue also made our discussion use limited reviews and older than the last five years references. Local literature could not be found on the issue, which is the limitation of this work.

REFERENCES

- Alhassan, A. B. (2017). Left handedness, the Bible and the Qur'an: Implications for parents and teachers. *Research & Reviews: Journal of Educational Studies*, 3(1), 19–26.
- Auwalu, S. A., Ibrahim, S., & Abdullahi, I. L. (2022). Prevalence of left handedness among students of Bayero University, Kano. *Bayero Journal of Pure and Applied Sciences*, 13(1), 129–133.
- Commisceo Global Consulting Ltd. (2020). *Ethiopia - Language, culture, customs and etiquette*. Retrieved January 1, 2020, from <https://commisceo-global.com/resources/country-guides/Ethiopia-guide>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches* (3rd ed.). Sage Publications, Inc.
- Department of Occupational Therapy. (2005). *Hand preference – Kids health information*. Royal Children's Hospital, Melbourne.
- Faurie, C., Vianey-Liaud, N., & Raymond, M. (2010). Do left-handed children have advantages regarding school performance and leadership skills? *Asymmetries of Brain, Behaviour, and Cognition*, 11(1), 57–70. <https://doi.org/10.1080/13576500500294620>
- Fisher, J. R. (2006). *Psychosocial differences between left-handed and right-handed children* [Master's Thesis, Wichita State University].
- Galobardes, B., Bernstein, M. S., & Morabia, A. (1999). The association between switching hand preference and the declining prevalence of left-handedness with age. *American Journal of Public Health*, 89(12), 1873–1875. <https://doi.org/10.2105/AJPH.89.12.1873>
- Gigante, S. (2023, August 11). *Lefties: Fact vs. fiction*. <https://blog.massmutual.com/about-massmutual/left-handers-day>
- Kushner, H. I. (2011). The art of medicine: Re-training the King's left hand. *The Lancet*, 377(9782), 1998–1999. [https://doi.org/10.1016/S0140-6736\(11\)60854-4](https://doi.org/10.1016/S0140-6736(11)60854-4)
- Lalumière, M. L., Blanchard, R., & Zucker, K. J. (2000). Sexual orientation and handedness in men and women: A meta-analysis. *Psychological Bulletin*, 126(4), 575–592. <https://doi.org/10.1037/0033-2909.126.4.575>
- Llaurens, V., Raymond, M., & Faurie, C. (2009). Why are some people left-handed? An evolutionary perspective. *Philosophical Transactions of the Royal Society B*, 364(1519), 881–894. <https://doi.org/10.1098/rstb.2008.0235>

- Malusi, B. M., Mungai, C., & Odiemo, L. (2015). Left-handedness as an overlooked special learning need. *Integrated Journal of British*, 2(4), 71–90.
- Manungo, R. D. (2020). Lived experiences of the left-handed: The case of Solusi University, Zimbabwe. *East African Journal of Education and Social Sciences*, 1(3), 39–51. <https://doi.org/10.46606/eajess2020v01i03.0041>
- Masud, Y., & Ajmal, M. A. (2012). Left-handed people in right-handed world: A phenomenological study. *Pakistan Journal of Social and Clinical Psychology*, 10(1), 49–60.
- McManus, C. (2002). *Right hand, left hand: The origins of asymmetry in brains, bodies, atoms and cultures*. Harvard University Press.
- Meng, L.-f. (2007). The rate of handedness conversion and related factors in left-handed children. *Laterality*, 12(2), 131–138. <https://doi.org/10.1080/13576500601005727>
- Qo'ldoshev, A. R. (2020). Difficulties in learning to write and read left-handed children. *European Journal of Research and Reflection in Educational Sciences*, 8(8), 40–45.
- Qo'ldoshev, A. R. (2021). Psychological aspects of left-handedness: Concept, causes, and peculiarities. *Psychology and Education*, 58(1), 4981–4988. <https://doi.org/10.17762/pae.v58i1.1719>
- Suyu-Tattao, L. (2016). Lived experiences of left handed students in a right handed academic world. *International Journal of Advanced Research in Management and Social Sciences*, 5(6), 426–433.
- Webb, J. R., Schroeder, M. I., Chee, C., Dial, D., Hana, R., Jefe, H., Mays, J., & Molitor, P. (2013). Left-handedness among a community sample of psychiatric outpatients suffering from mood and psychotic disorders. *Sage Open*, 3(4). <https://doi.org/10.1177/2158244013503166>
- Willig, C. (2001). *Introducing qualitative research in psychology: Adventures in theory and method*. Open University Press.