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Unnoticed but Excluded: A Narrative Inquiry of Left-handed Individuals

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Abstract

This study aims to explore the social exclusion, stigma, and discrimination that left-handed people encounter in a right-handed society. This research uses a narrative inquiry approach to explore the lived experiences of ten left-handed participants to reveal cultural, religious, and structural biases. This study shows that stigmatizing labels and societal norms contribute to the marginalization of left-handed individuals. Religious traditions frequently link left-handedness to uncleanness and bad luck which results in greater social discrimination. The research shows that left-handed women experience greater societal and religious pressure to follow traditional norms. The use of tools, writing desks, and technology made for right-handers creates ergonomic difficulties for left-handers which produces psychological distress and decreases their self-esteem and creates workplace disadvantages. The study reveals that despite rising neurodiversity awareness, institutional and cultural biases continue to restrict left-handers from achieving their social and professional goals. The research demands inclusive policies together with adaptive designs and social awareness to fight these deeply rooted prejudices. This research links handedness to systemic exclusion while contributing to discussions about social identity and human diversity and equality to advocate for an inclusive accessible society.

Keywords

Left-handedness, Social exclusion, Unconscious bias, Gender discrimination, Structural exclusion.

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1. Background

“The human digestive system is simple, it starts with a right hand and ends with a left hand!”

Above witticism may be common among many school-goers. The tale of right and left-handed is not limited to a digestive system but it is much more researched and discussed in numerous disciplines such as neurological science, medicine, psychology, economy, and anthropology (Johnston *et al.*, 2007). For instance, in one of the scientific literature, Gutwinski *et al.* (2011) write that the asymmetrical cerebrum of humans is a decisive factor in the development of complex cognitive control processes including the development of handedness. Similarly, Kushner (2017) writes that left-handedness is associated with differences in brain lateralization, which can contribute to unique problem-solving skills and creativity. In the same vein, Willems and Francks (2014) also argue that lefty people make up more of the extremely gifted hitherto (Willems & Francks, 2014) but some scholars such as Brandeler & Paracchini (2014) have claimed that lefty is more likely to be schizophrenic, alcoholic, dyslexic and delinquent.

In sociology, such delinquent behaviour is claimed to be due to negative labeling process. Becker (1963) argues that social labels can influence a person's identity and behaviour, perhaps leading to unacceptable conduct. A self-fulfilling prophecy of negative behaviour can occur when someone internalizes the label of being bad or incorrect. This process shows that social stigmatization, negative labeling, and exclusion perpetuate left-handed individuals to delinquent behaviour. However, in one of the psychological research, Andrew (1980) found that left-handed juvenile offenders scored lower on violence scales than their right-handed counterparts, indicating that left handedness cannot be the sole reason for delinquent behaviour.

Apart from such scientific, sociological, and psychological explanations, left-handedness is heavily discussed and criticized in

religious literature. For instance, according to Fabbro (1994), in biblical references to the left and right, 151 Old Testament and 49 New Testament verses mention the directions where the right hand is favored and the right side holds more prestige, suggesting a historical bias towards right-handedness. In gist, left-handed people have historically faced societal, cultural, and religious biases. Research indicates that left-handed individuals encounter challenges due to a world designed for right-handed people, yet they also exhibit cognitive and creative advantages (Papadatou-Pastou *et al.*, 2020).

2. Sacred Hands: Rituals, Stigma, and Adaptation

Research suggests that cultural and religious factors influence the prevalence of left-handedness, with more religious societies often exhibiting a stronger preference for right-handedness (McManus, 2009). The stigmatization of left-handed people can also be influenced by societal norms, which are frequently influenced by religious traditions (Faurie and Raymond, 2004). Since the right hand is thought to be pure, it is generally employed in Hindu ceremonies to undertake sacred activities like praying or giving alms, whereas the left hand is frequently connected to impurity (O'Flaherty, 1980).

Similarly, Flood (1996) also mentioned that in Hindu iconography, deities often use their right hand for blessings and protection, signifying righteousness and divine power. While the right hand is commonly used to represent compassion and understanding in Buddhist mudras, the left hand is utilized to signify worldly illusion and transformation (Beer, 2003). Samuel (2008) also writes that, in Hindu and Buddhist Tantric traditions, Vamacara (the left-hand path) is referred to mystical and non-traditional spiritual practices, whereas Dakshinacara (the right-hand path) refers to orthodox ceremonies. Especially in Hindu mythology, Kinsley (1997) noted that Lord Shiva's left hand symbolize change or destruction.

In certain cultures, left-handed people are accused of friendship with the devil. According to Coren (1992), during the Inquisition, left-handedness was sufficient to sentence a woman to death as a witch, and many innocent left-handed people were executed in this way. This denotes that, the right arm was blessed, while the left-handed served the devil. Further, making a sign of the cross with the left hand was a heresy that caused hell. In both Islam and Hinduism, the right hand is used exclusively during solemn ceremonies (Dragovic, 2001). Only in Tantric Buddhism

left-handedness is considered positive, and a symbol of wisdom (Corrbalis, 1983). This shows different religious belief have their perception toward left-handedness.

The study of handedness traits is also transmitted across generations. Mckeever (2000) writes, that two left-handed parents produce the highest proportion of left-handed children. This suggests that hand preference is partly genetic. Several studies have also shown that handedness can be changed due to cultural influence. For instance, in Tucoano of Amazonia, handedness is modified at an early age of children through positive reinforcement (Bryden *et al.*, 1993). This suggests a strong cultural pressure can change hand preference during the early age of an individual. Similarly, if a particular hand is forced to be used in several activities, this can also help to change left-handed to another. For example, in Taiwan, due to strong cultural pressure, only 0.7% of left-handed writers exist (Teng *et al.*, 1976) which is comparatively much lower than Asian school children living in the USA (6.5% of left-handers) where cultural pressure is less (Hardyck *et al.*, 1976).

3. Left-Handed in a Right-Handed Society

Hardych and Petrinovich (1977) write that there are about 90 percent right-handed population in the world. This is why left-handed individuals often face unique challenges in a world designed predominantly for right-handed people. For instance, using scissors, pens, and right-handed desks in schools, measuring cup that has millimeter markings, and so on. Besides these equipment, sports materials like golf clubs, gloves for baseball catchers, and bows in archery games are also designed for right-handed people. Smith (2020) also argues that computer mouse has a default setups that favor right-handers, requiring left-handers to adjust settings or adapt. Because of tools and equipment made for right-handers, left-handers also face safety hazards in their workplace.

In the academic sector as well, this mismatch can lead to decreased performance and increased physical discomfort to the left-handers. According to Qo'ldoshev (2021), left-handed children show common behaviour including creative, emotional, slow learning normal behaviour, but lack of self-confidence or courage, low focus which reduces efficiency and increases exhaustion, low school competency, and difficulty in group work. A review highlighted that societal neglect in providing for left-handed individuals' needs leads

to their marginalization and calls for increased awareness and inclusive practices to address such oversight (Malusi *et al.*, 2019).

Furthermore, in some communities, due to cultural and religious beliefs, left-handed people are also stigmatized linking with negative connotations. Agegnehu & Gebre (2024) found that left-handed children are frequently pressured by their family and society for not using their left hand for activities such as eating and writing. Seeley (2012) also explored the role of handedness on startle response reflexes in terms of its ability to predict drivers' reactions during an unanticipated driving situation. The left-handed biker also showed difficulty in throttling accelerator which is by default manufactured for right-handed riders.

Sin (2015) noted that the self-esteem of left-handed employees is affected in two ways: first, when they are not able to fulfill their task, and second, the feeling of neglect by their employers. In one of the research, Johnston *et al.* (2007) found that left-handers spend more time watching television than right-handers, leading to poor performance in nearly all measures of development such as learning, social, cognitive, and language except for reading. However, on the other hand, Randerson (2001) found that left-handers have better memory due to their brains are structured in a way that widens their range of abilities. Tigar (2018) also explored that left-handers are generally more intelligent and creative than right-handers. Despite numerous researches on difficulties for left-handers in terms of technical hurdles, cultural stigmatization, and labeling, empirical research lacks how such processes lead to social exclusion. This study attempts to link the left-handedness of an individual with the exclusion as a whole.

Conceptual framework of study is shown in following figure:

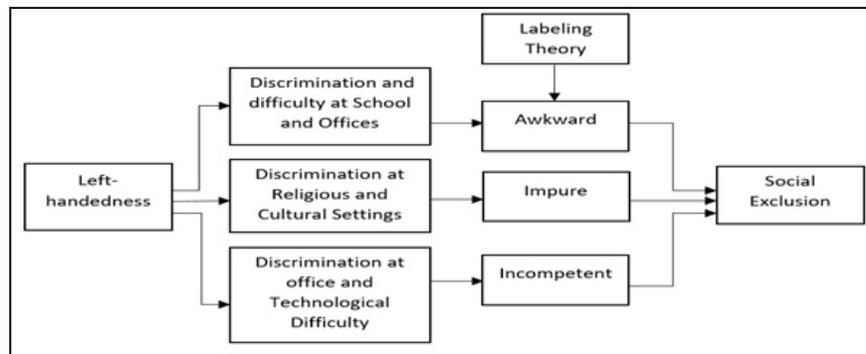


Figure-1: Conceptual Framework for Left-handedness and Discrimination

Historically, left-handedness individuals have been discriminated against in different social settings. They have been discriminated, against and criticized at school, workplace, religious places, and activities associated with it. In these settings, left-handed individuals have been labeled negatively. Labeling theory explains that individuals labeled as deviant may experience social exclusion, as such labels influence both societal reactions and the development of self-identity (Becker, 1963; Lemert, 1951). Such negative labeling pushes left-handed individuals away from the social setting. Negative labeling of left-handed can lead to self-fulfilling prophecy which forces them away from their social relationships and activities. This process leads them to social exclusion.

4. Methods

To explore how left-handed people feel during such stigmatization, and how they perceive various experiences in the right-handed society, a narrative research design is implemented. A total of 10 left-handed individuals (7 female and 3 male) were selected as a research participant with a purposive sampling method. The selected research participants were interviewed on different dates. Responses from research participants are transcribed, translated, and analyzed with the narrative method. To protect research participants' privacy and identity, pseudonyms are used instead of their real names.

5. Results and Discussion

This section explores the daily life experiences and perceptions of the research participants being left-handers. The responses are analyzed in a narrative way sociologically to provide meaningful interpretation of unknowingly excluded sections of people.

5-1 Change & Continuity: Cultural and Religious Stigmatization

Social and cultural biases against left-handed vary across different societies. The highly religious society comprises higher stigmatization against left-handers than in less religious society. Country like Nepal where Hindu believers have religious rules in terms of offering fruits and other materials to god with their right hands. In such a society, lefty people are more or less stigmatized as impure and devils.

Religious sites are one of the key venues where different lives and behaviours are explained through religious thoughts and beliefs. Ishwori (pseudonym) replied, Ishwori (pseudonym) replied, "While

praying or worshipping we are supposed to use the right hand for everything-such as when taking prasad, putting tika, flowers and while worshipping (Pooja)” (Personal communication, February 27, 2025). Further, she adds, *“During such pooja, if mistakes happen using left-hand, pandit ji would scold me asking me to use the right hand. It would be confusing because instinctively I would use a left hand”* (Personal communication, February 27, 2025). This is a common challenge that most left-handed individuals face in their religious life and activities. The religious norms for right-handedness suggest using their right hand during such events due to which a person having a left hand as a leading hand is criticized.

Further, one of the female research participants Navina (pseudonym) replied that *“due to my left-handedness, I always become a subject of criticism when there is pooja at home. Sometimes, I don’t even get a chance to offer fruits and flowers to god during such occasion”* (Personal communication, February 16, 2025). Mira (pseudonym), a female participant also faced such criticism from pundits occasionally, when there is *Rudri* (Religious worshipping practice in Hinduism) worship at home. According to her,

“Once I offered fruits and flowers to the god with my left hand, immediately, the pandit criticized that all the hard work and worship is waste after I offered fruits and flowers to god with my left hand. I know that nothing will happen with this but it hurts when someone passes critical comments on such. I felt, being a left-handed, I am excluded not only from such gathering but also from the whole society” (Personal communication, February 20, 2025).

In a similar vein, Sita (pseudonym), another female research participant informed that *“when pooja is done by the left hand, people will start criticizing that they won’t receive what they have wished before starting such pooja”* (Personal communication, February 20, 2025). Both the statements from Mira and Sita demonstrate that thinking left-hand as a bad omen in society is prevalent. With such stigmatization of left-handed in religious activities, it can be articulated that left-handed people are religiously discarded and treated as an unwanted section of society. Further, the above statements demonstrate that left-handed people are discarded both in public and private religious settings. This also suggests that, despite education and social change, society continues to view and treat left-handedness in a traditional way.

Mira further remembers a criticism when she bowed to a god statue near her home. According to her,

I live in Newari society so one day I heard a whisper from my back, saying, look! Akhha le Dhogyo, means lefty bowed to a god. After I finished my worship, these Newari women cleaned and purified the god statue with water and did their regular worship. When remember, this still hurts me. I feel being a left-handed person, I am not one of them. I do not belong to this society. (Personal communication, February 20, 2025).

The stereotyping of left-handed people is a process of exclusion. However such stereotyping is not the case for everyone, especially for different genders. One of the male research participants Bishnu (pseudonym) reported that *“I do not have any problem in my family and among my relatives. Instead they think I am intelligent due to left-handedness”* (Personal communication, February 21, 2025). Bishnu’s statement demonstrates that left-handed males are treated differently than left-handed females. Left-handed women and girls are criticized negatively whereas boys are praised or at least harsh comments are rarely passed on.

Shivahari (pseudonym), one of the male participants said *“We are less involved in religious activities so despite there being criticism, boys receive less biasness and criticism from others”* (Personal communication, February 15, 2025). In several religious activities, the involvement of males is less in comparison to females. If not, the patriarchal social structure and superior position of males in society are making such differences. In that sense, it can be said that criticism and comments to left-handed females are due to a patriarchal mindset rather than religion itself, at least in Nepalese society and culture.

Similarly, another female respondent Hira (pseudonym) informed that *“there is no problem being left-handed for males but when it comes to females, all the cultural and religious rules pop up. I normally stay out of food serving during feast because people tease me for serving with my left hand”* (Personal communication, February 12, 2025). This statement shows that being left-handed matters if a person is male or female. As females are mostly in traditional gender roles such as serving food, attending guests, doing dishes, washing clothes, and daily offering to the god, left-handed is easily visible and when such movement of the differently oriented body part is

identified, it is normally criticized or make a part of fun. If not, it is interpreted from a religious perspective as wrong or impure. But again, males left-handed are less concerned for people compared to females.

Nowadays, left-handedness is interpreted not only from impurity perspectives but also from talent and extraordinary. According to Bishnu, *“When my parents noticed that I am left-handed, they always encouraged me as they heard that left-handed are intelligent. But I am slow in fact (laugh)”* (Personal communication, February 21, 2025). Bishnu tried to hide his emotions with a laugh, but his statement demonstrates that there is less concern about male left-handedness in the family and society. Ishwori also thinks that *“...there are two narratives for this, a myth that left-handed people are talented and blessed, and another...bad or unlucky”* (Personal communication, February 27, 2025).

Despite the left-handed individuals are also considered a talented person, they are culturally dominated and humiliated on the daily basis. For instance, Dibya (pseudonym), also faced intimidation during religious activities at her relative’s house. According to her,

During pooja at one of my relatives, a group of girls started to work in the kitchen. One of my relatives handed me a potato peeler. I noticed, my cousin peeling potatoes from downward to upward movement, using a peeler. But when I used it with my left hand, there was no blade in that direction. Instead, I had to do the opposite movement. My relatives laughed at my hand movement. I didn’t mind for that but this sarcasm might be common to many left-handers. (Personal communication, March 5, 2025).

Although there are few Y-shaped peelers available (that work for both left and right-handed), people normally buy peelers that suit right-handed people because only right-handed peelers are sold in the market. The scientific innovation and design, in this case, seem to be biased toward left-handed people. Due to such, many left-handed individuals are pushed away from their daily activities. For instance, Ishwori said,

Some people do not make them work such as cutting and washing foods because they find it unusual and looks different and difficult. Many times, I used to get scolded for not being able to use scissors properly. My mother and sister used to call out

while I was holding a scissor and struggling to cut things perfectly. Sometimes, they used to call me lefty if I did something wrong and using my left-hand looked weird to people. So, after some time I was annoyed by people saying how weird and difficult it looks to work from left hands. (Personal communication, February 27, 2025).

This shows that there is subtle discrimination against left-handed individuals in the society. Despite a decline in the stigmatization and discrimination of left-handers, they continue to face labeling and exclusion.

5-2 Difficulties at Educational Institutions

Since most students are right-handed, factories make equipment and learning materials that suit right-handers. However, a small fraction of left-handed students, and their needs are less remembered. In terms of difficulties at educational institutes, Ishwori replied that,

Since, I was not aware that things could be so differently designed, therefore so many things might have gone unnoticed for me. However, using a ruler was always my problem at school, I couldn't hold it properly and was always trying new ways to hold the ruler. I thought I lacked the skills. (Personal communication, February 27, 2025).

Ishwori and her handedness is one of the common problems among left-handers whose problems are unintentionally forgotten or ignored by society. Due to this, Ishwori and many other left-handers have lost their self-confidence while using such equipment at school that is designed for right-handers. Such equipment has put them in an awkward situation of not being able to properly hold and use it.

In a similar vein, Bishnu replied “*Sometimes, I feel so awkward when the right-hander colleagues forcefully shake my right hand. As I am lefty, I rarely shake my right hand with others. While shaking, I keep my right hand loose so that it looks shaking*” (Personal communication, February 21, 2025). Many right-handers have a general assumption that the person in front of them is also a right-hander. Such an assumption might have led Bishnu to an awkward situation.

Importantly, Shivahari faced a challenge while attending a day-long conference at his college. According to him, “*The seats at the conference hall are nice and cozy but during a daylong conference, I*

have to switch my body posture to the right side as there is a writing support board designed for right-handers. That remained difficult for me” (Personal communication, February 15, 2025). This is one of the common mistakes that a right-handed mentality has produced in society. The right-handed support board in the exam halls is so painful for the students with left-handed where they have to keep their body posture for three hours long. If the teachers have that sense and compassion, left-hander students can get that chance to escape such difficulty. In this same, Ishwori replied,

Sometimes, teachers ask how many students in the class are left-handed so that seats can be arranged accordingly to avoid disturbances while writing. Occasionally, my hand position clashes with that of right-handed students sitting to my left, and in such cases, we swap seats. I usually avoid sitting in the middle of the bench. (Personal communication, February 27, 2025).

Left-handed students often need special tools, which may not always be available in schools. One of the male research participants Sagar (pseudonym) informed that,

I always have problems while attending any classes associated with computers at the lab or during the library where I need to search for literature. The mouse is on the right hand and due to which, many times, I accidentally grabbed a friend’s mouse on the left hand. Due to non-lead right hand, my work is always slow and no one understand this issue. (Personal communication, February 26, 2025).

The case of Sagar is not only discouraging him from library and computer use at the computer lab but it is making his work entirely slower than other right-handers as such equipment is designed for right-handers which have kept right-handers students at least a step ahead of the left-hander students in educational institutions. Apart from the library and computer lab, Dibya initially wondered why her scissors were not working while it was perfectly working a while when her right-handed friend was cutting the same paper. According to her,

During a paper-cutting session in my class, my friends cut colorful papers in a design they wished to but when I use the same scissors, the same task remained a disaster. It never happened. Till that time, I didn’t know that a scissor was designed for right handed person. Two inner blades of scissor never come across when I used scissor. (Personal communication, March 5, 2025).

The difficulty that Dibya faced is a common among many left-handers. Despite having a differential interest in origami session, many left handers like Dibya do not get the opportunity to excel in their interest or career. For that, they might need to search for special scissors or equipment that perfectly match their hand.

Mira also informed that;

The door handles are also designed for right handers. There is one classroom with a door sliding to the right side. It is better and effortless for both the handers if there could be two piece door that opens simultaneously when we push. Most importantly, my left hand always collides with other hands while eating in the canteen. This led to spill of tea and other food. (Personal communication, February 20, 2025).

These narratives demonstrate that although criticism against left-handedness has decreased in educational settings, lefty people are still excluded in terms of various school-level activities. The society and school, assuming zero left-handers, led to manage equipment according to right-handers only. This is a structural bias due to which left-handers automatically fall into structural exclusion.

5-3 Force Conversion: Is it Gendered?

Left-handed women are discouraged from using their dominant hand during social activities and rituals. Where possible, they are pressured to use their right hand from an early age. According to one of the research participants Priyanka (pseudonym), *“I belong to Newari ethnic group. During our pooja (worship), we must use our right hand, as the left hand is considered impure. My mother always forced me to use my right hand during such an event. But I cannot do that, so I rarely attend religious events”* (Personal communication, February 10, 2025). Priyanka’s story is just a gesture where many left-handers like Priyanka quit participating in social, cultural, and religious events due to the compulsion of the right hand.

The force to convert a child’s left-handedness is also a story of many other left-handers. For instance, a female research participant Gauri (pseudonym) said, *“I don’t remember when I became the lefty. I belong to a Brahmin family and as left-hand is considered bad in my culture, my parents tried their best shots to convert my left-handedness but it never happened”* (Personal communication, February 17, 2025). Both Gauri and Priyanka's statements

demonstrate that left-handers hardly quit their leading hand, instead, they quite social events.

Nonetheless, left-handedness is not an issue for every family. For instance, Ishwori informed that *“I have no problem being left-handed in my family. My aunt or family members never forced me to use my right hand”* (Personal communication, February 27, 2025). Similarly, Mira also reported that *“my father is also left-handed so my parents never tried to convert my left handedness”* (Personal communication, February 20, 2025). Mira’s statement on this denotes, that parental understanding, experience, and attitude also make a difference in whether the left-handed child goes for forceful conversion or not.

In the same, Dibya also informed that her aunt forced her to use her right-hand many times. According to her, *“During my childhood, my aunt tried so hard to restrict my left hand but remained unsuccessful. She used to give me a right-hand task but the next day, I come up with left hand in every task provided”* (Personal communication, March 5, 2025). This statement shows that although a few families have no problem with left-handedness most of the families are reluctant to left-handedness and they try to change the orientation of a child’s handedness from the beginning.

These narratives show that the conversion of handedness is mostly prevalent among females. The patriarchal notion of engaging females in traditional roles seems dominant for forcing the conversion of handedness among females. Nevertheless, the handedness among different ethnic and cultural groups varies.

6. Conclusion

Left-handed individuals have historically been criticized, assuming it as abnormal. In Hindu traditions, the right hand is considered pure and sacred, whereas the left hand is considered impure as it is associated with hygiene activities. It is a trait of all other religions to treat others differently if such practices and behaviours are different than theirs. In such, if anyone refuses to follow their way or if individual’s behaviour is different than theirs, the people associated with that religion simply discard such behaviour and individual. In that sense, negative connotation of left-handedness is one of the products of religious exclusion and this exclusion further couples with cultural and social stigmatization. Although left-handed people are able to handle any mechanical work,

they are simply labeled or stigmatized negatively (defiled, incompetent and bad omen), pushing them toward a multiple exclusion in a society.

To conclude, left-handed people are the victims of multiple social aspects such as religion, culture, society and economy. They are the section of people whose identity is much criticized but their exclusion, discrimination and systematic bias is less discussed in right-handed society. Intersectionality approach can be applied in order to further explore their exclusion. Other non-dominant traits can be explored to observe similar social discrimination and to establish marginalized trait theory.

Conflict of Interest

There is no conflict of interest associated with this research.

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