

Navigating Identity: Cultural Impact on the Demographic Behaviors of migrant *Hela* community of West Bengal

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Abstract

This study examines the demographic behaviors of the migrant Hela community residing in Kolkata, West Bengal, with a focus on how ancestral cultural attachment influence fertility, mortality, and marriage patterns. Traditionally marginalized and identified as Dalits, the Hela migrated from Uttar Pradesh to Kolkata to escape socio-economic discrimination. Based on data from 134 ever-married women, the study analyzes the community's marriage practices, reproductive behavior, and adaptive fitness. Results indicate a strong adherence to endogamous and consanguineous marriages within the group, which underscores their cultural solidarity amid a host environment of distinct social dynamics. The Hela's fertility and mortality pattern surpasses that of their Bengali neighbors, closely aligning with their ancestral demographic patterns in Uttar Pradesh, likely as a means of preserving cultural continuity in a new setting. The selection intensity index shows the population is undergoing selection processes. This research emphasizes the importance of social and cultural cohesion in shaping the demographic profile of migrant communities.

Keyword: Culture, migration, fertility, mortality, marital distance, identity, Hela, India

Introduction

The basic structure in demography is formed by its population composition, fertility and mortality patterns and migration. Fertility and mortality are the basic indicators of population dynamics and there are a number of factors determine these two variables for a population (Dreze *et al.* 2001; Bhahsin *et al.* 2002; Skirbekk, 2008; Majelantle, 2013; Asghar, 2014). Cultural beliefs and practices often play an important role in understanding the demographic phenomenon (Basu, 1992; Bhatt, 1998; Branson, 2010; Ghosh & Begum, 2015). For example, the cultural practice of *Mukhagni* (last cremation ceremony among Hindus) forced to have at least one male more child in family (Kalam *et al.* 2020). Caldwell's Wealth Flows Theory marks a crucial shift in demography by suggesting that high fertility rates in Third World countries are economically rational which also highlights the role of culture in influencing demographic stability and change (Caldwell 1977).

On the other hand, the pattern and practice of marriage is often an indicator of cultural homogeneity, especially among the migrants. A community member tried to get married within the same community member, relatively nearer and/or the places from where they migrated (Kalam and Roy 2015; Kalam *et al.* 2020). Ceroni-Long (1985) observed that migrant groups prefer to marry within their own group due to the survival risks posed by the native majority group. Marital preference is another cultural process that signifies a community's cultural identity (Fox, 1983; Murdock, 1947). It is believed that the practice of endogamy plays a significant role in the survival of the social organization of the community by maintaining behavioural isolation from other such communities (Fox, 1983; Chagnon, 2000; Bittles & Black, 2010). For example, the age-set marriage system among the *Rendile* population of North Kenya (Douglas, 1966) and the marriage pattern among the *Mokogodo* population of Kenya (Cronk, 2000) yielded examples of mate selection that depend on their social organization. Another example of maintaining cultural identity through endogamous marriage is the marriage patterns among the *Khotta* population of West Bengal (Kalam & Roy, 2015).

Endogamous marriage patterns may increase the frequency of cousin marriages in a population, leading to a higher probability of marriage within blood relatives i.e., consanguineous marriage (Billtes 2012). In India, the prevalence of consanguineous marriage was around 10.0%, depending on the region of residence (Sharma et al. 2021). Local community level variation in the prevalence has been observed such as the prevalence ranges from 35.5% among the migrant Telugu-speaking population living in West Bengal (Das, 2003) while 34.78% among migrant *Darbhanga Khotta* population (Kalam, 2021). The prevalence of consanguineous marriage varies with socioeconomic condition, educational attainment, geographical region, religious belief and cultural practices (Krishnamoorthy & Audinarayana, 2001; Iyer, 2002). The higher rate of cousin marriage in a population can lead to inbreeding depression and the natural selection of a population fall in a critical situation (Wright, 1922). Differential fertility and mortality are impediment not only in studying the structure and trends of a population but also in measuring the adaptive fitness of a population (Barua 1976). Selection intensity of human population is a measure of adaptive fitness and it has noted variation regarding factors like differential cultural practices (Sphuler, 1962; Mukhopadhyay, 1981), education and social status (Reddy et al. 1990) and environmental condition (Roy et al. 2014; Kalam et al. 2023), etc.

Thus, understanding the importance of ancestral culture is crucial for explaining the dynamics of demographic phenomena in populations. This study specifically aimed to examine the demographic composition, marriage patterns, and adaptive fitness of the migrant *Hela* community residing in the Kolkata district of West Bengal.

Materials and methods

The study population

The '*Hela*' population were referred to under the generic term '*Methar*'. The *Hela* are mainly found in the districts of Varanasi, Ghazipur, and Mirzapur. Majority of the *Hela* are known for being scavengers, some are agriculture labourer, small business, trade, and government services in the sector of scavenging (Singh et al 2010). According to Census of India (2011), in Uttar Pradesh the *Hela* population

was 52,314. They belonged to the Scheduled Castes in India, mostly regarded as *Dalits*. It was reported that the *Hela* wore typical ornaments as well as tattoo markers as their identification. They consume pork and occasionally the meat of “*Bhains*” or ‘*Beef*’, a typical character for a lower caste people. It has also been found that consanguineous marriage was common among them (Singh et al 2010). They prefer to communicate within themselves in *Hindi*.

The *Hela*’ community in the present study were living in Kolkata Municipality Corporation (KMC), ward number 79 of the state West Bengal. They were migrated to Kolkata from Uttar Pradesh (Varanasi and Mirzapur district) due to many socio-economic obstacles mostly due to discrimination and untouchability faced in Uttar Pradesh. The demolition of *Babri* mosque in Uttar Pradesh catalysed the rate of migration. The group of *Hela* people shifted their abode from different districts of Uttar Pradesh to Kolkata and settled in *ghetto* in Kolkata Municipal Corporation ward number 79 at Ballygunge region of Kolkata, West Bengal, the residential area of elite class of Kolkata. This *ghetto* was called as *Hela Basti* by the nearby native Bengali population. They were now able to understand and speak Bengali language due to their living and job opportunities in Kolkata, surrounded by Bengali natives.

For the present study purpose, 125 households of the *Hela* community have been surveyed. Among them, 134 ever married women were interviewed.

Data types and collection techniques

The data for the present study have been collected by using pretested household schedule and pregnancy history form. The household schedule includes age, sex, relationships, monthly household expenditures, marital status, education, occupation, marital distance and marriage preference, age at first marriage of the participants to get an idea of the population. Data on the fertility, mortality, age at first pregnancy, age at last pregnancy have been collected by using pregnancy record form. Pedigree has been drawn to know the family composition, marriage alliance. The data on marital distance were calculated by estimating the distance between husbands and wives birth places. The marital distance was also used to get the data on different

forms of migrations. The schedules were also crosschecked with the pedigree. An in-depth interviews and case studies were conducted to collect data on communities' perception regarding marriage preference, age of marriage, education, migration, job opportunities, and other social issues after migration.

Adaptive fitness or the Index of opportunity for selection of the *Hela* population was calculated based on differential fertility and differential mortality using Crow (1958). The formula for Crow's index was computed using the following steps-

$$\text{Crow's index: } I_t = I_m + I_f / P_s$$

where, $I_m = P_d / P_s$, $P_s = (1 - P_d)$, $I_f = V_f / X^2$; I_t = index of total selection intensity, I_m = index of selection due to mortality, I_f = index of selection due to fertility, P_d = probability of deaths up to pre-reproductive age, P_s = probability of survival up to reproductive age, V_f = variance due to fertility, and X = mean number of live births.

Results and Discussion

Population composition and socio-economic characterises

Table 1 shows the age-sex wise population composition of the *Hela* community in the study area. It shows majority of the population, especially females were belonging the reproductive age group i.e., 15-44 years. Population pyramid (Figure 1) also showed that the base of the population was thick compared to the old age population. The sex ratio and child sex ratio of the studied population was 1207.0 and 1631.0 respectively which were higher compared to the state of their ancestral residence as well as state of migration and the nation. The ancestral place i.e., Varanasi and Mirzapur showed sex ratio of 887 and 900 and child sex ratio of 873 and 902 respectively (CoI, 2011). The demographic situation is changing and improving among the *Hela* people living in Kolkata. It may possible that the *Hela* people believe that having more number of girls in community helps them survival by producing a greater number of children in new environment. Kolkata was one of the first cities where enlightenment began earlier due to the British influence (Ghosh, 2016). Having more females in a population can have a psychological impact, as it helps to produce

more children in migrant places, thereby increasing numerical power while living near the native population.

In Table 3, the occupational status of the population is presented. The data shows that most of the working population (17.83%) was employed as sweepers/scavengers in the Kolkata Municipal Corporation (KMC), with male participation at 27.63% and female participation at 9.71%. Additionally, around 31.22% of females were employed as housemaids, working in others' houses as child caretakers or doing cleaning work monthly. A few people who gain more education joined in higher level of government jobs (2.01%). It was found that working in KMC as sweeper or scavenger did not need high level of educational attainments, completing secondary level of education is enough for this job.

The results revealed that approximately 31.22% of females are employed as domestic helpers for cooking and cleaning in households. The participants recognize that this is mainly possible in Kolkata, where discrimination based on caste is uncommon. As members of lower castes, they can work in households of upper castes, even as cooking assistants.

A 38-year-old female respondent said, "in our ancestral place, you wouldn't find a situation where a person from a lower caste works in an upper caste family. However, in Kolkata, it's very normal. At least in my experience, there has been no discrimination based on caste. The people of Kolkata invite us and allow us to work with them."

Table 4 showed that 42.27% population were educated up to secondary level. During the interviews, it was clear that the candidates were not interested in pursuing higher education. Their rationale was that higher education often leads to better job opportunities, which can be difficult to attain. On the other hand, they believed that obtaining a lower or secondary level of education would enable them to enter government jobs at an earlier stage, even though these were perceived as lower-level positions.

42 years male respondents share that, ‘...After studying so much, what will happen? Yet we have to do the cleaning and sweeping related work. You can't get a good job by studying higher, and you can't be interested in doing cleaning work then. So, minimum secondary level of education is enough.’

Age group (in years)	Males	Females	Total
0-4	12(5.4)	20(7.46)	32(6.53)
5-9	21(9.45)	22(8.21)	43(8.77)
10-14	15(6.75)	26(9.7)	41(8.36)
15-20	23(10.36)	20(7.46)	43(8.77)
20-24	21(9.48)	33(12.33)	54(11.02)
25-29	29(13.06)	32(11.94)	61(12.44)
30-34	25(11.3)	23(8.59)	48(9.79)
35-39	17(7.65)	19(7.08)	36(7.34)
40-44	11(4.95)	17(6.34)	28(5.71)
45-49	16(7.2)	21(7.83)	37(7.55)
50-54	13(5.85)	10(3.73)	23(4.69)
55-59	5(2.25)	7(2.62)	12(2.44)
60-64	9(4.05)	11(4.10)	20(4.07)
65+	5(2.25)	7(2.61)	12(2.45)
Total	222(100.00)	268(100.00)	490(100.00)

Table 1: Age and sex wise distribution of the population

Figures in parentheses indicate percentage

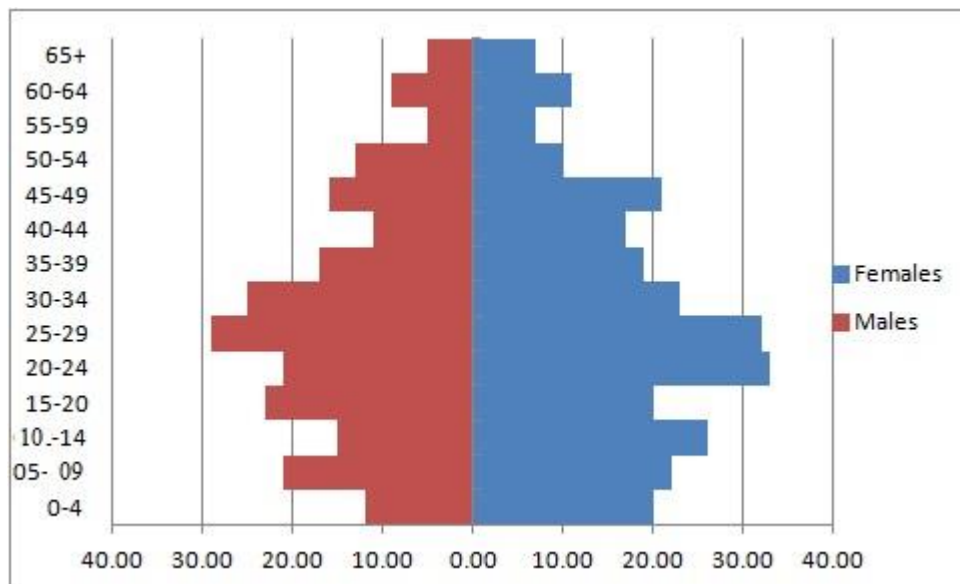


Figure 1: Population pyramid showing age-sex wise distribution of the Hela population of Ballygunge area of Kolkata

Types of sex ratio	Sex Ratio	Kolkata	Mirzaur, Varanasi	Census of India (2011), India
Total sex ratio	1207	899	903, 918	943
Child sex ratio (0-6 y)	1631	955	899,841	919

Table 2: Sex ration among the studied population

Occupation	Males	Females	Total
Kolkata Municipal Corporation sweeper/scavenger	55(27.63)	23(9.71)	78(17.83)
Daily labour	61(28.14)	6(2.53)	67(13.93)
Job seeker	26(13.06)	47(19.84)	73(16.40)
Govt. job	4(2.01)	0(0.00)	4(0.89)
Housemaids	-	74(31.22)	74(16.62)
Homemaker	-	29(12.24)	29(6.51)
Students	48(24.14)	53(22.36)	101(22.69)
Retired	5(2.51)	5(2.10)	10(2.24)
Total	199(100)	237(100)	446(100)

Table 3: Working status of the population*Figures in parentheses indicate percentage*

Education	Male	Female	Total
Cannot sign(illiterate)	46(22.33)	132(55.23)	178(40.00)
Nursery to 4 th standard	30(14.56)	45(18.82)	75(16.85)
Secondary	137(66.50)	52(21.75)	189(42.47)
Higher secondary	6(2.91)	4(1.69)	10(2.24)
Graduated	6(2.91)	6(2.91)	12(2.69)
Total	206(100)	239(100)	445(100)

Table 4: Educational attainments of the study participants*Figures in parentheses indicate percentage*

Marital preferences

In Table 5, the marriage preferences of the *Hela* population were presented, reflecting their choices of marriage. It was observed that approximately 91% of the respondents married within the same group. The table also indicates that all marriages within the same group were consanguineous, with 97.7% being first-cousin marriages and 3.3%

being second-cousin marriages. Table 6 reveals that about 40.0% of marriages took place within the study area i.e., within zero kilometres distance, and 56.0% of marriages were contracted between ancestral places in Uttar Pradesh. It has raised a question why they marry within the same group and cousins. During interviews, it was observed that due to migration, they were minority Kolkata surrounded by native Bengali people. According to Cerroni-long (1985), migrant groups always prefer to marry within the same group due to the fear of social and cultural agony by the native group. Similarly, it was also observed that the *Hela* group prefers to marry within same group and with cousins to maintain social solidarity within them which corroborates with the study by Kalam et al. (2020). Kalam and Roy (2015) found similar patterns among *Khotta* Muslims, who marry within the group to maintain social solidarity due to their migrant minority status. It seems that ancestral cultural practices encourage the *Hela* community to marry within their own group to preserve cultural integrity, ensuring that their unique heritage remains intact and resilient. This tradition not only reinforces their shared values but also aids in adapting and thriving within new environmental settings, fostering a strong communal identity that endures through generations.

A participant of the age 40 shares her views as, *'marrying with another group may create familial hindrance which will further weaken the group solidarity. We are the migrants here. Thus, we must be careful in this regard.'*

On the other hand, it has been revealed in interviews that individuals from other groups are unwilling to marry the *Hela* participants due to their lower social status. The nearby Bengali group prefers to marry within their own community, matching their castes. Consequently, if someone from the community was not interested in marrying here in the *ghetto* of Kolkata, they went to the ancestral places and marry within the same group, belonging to the same caste. As a result, the marital distance was higher for those who marry in ancestral places (Table 6). Marrying within the same caste group for a long time ultimately leads to marriage within close relatives (NewScience, 2009).

A 39-year-old participant responded, "We belong to a lower caste. None of the other caste group members in the neighboring Bengali community were interested in marrying us. They often avoid us, saying we are migrant Biharis."

The migrant status was attached to them because they migrated from Uttar Pradesh. The *Hela* community members were living there in some kind of fear in their back. Their earlier experiences remind them to understand that if any kind of riot-like situation occurred here, they will be bound to leave the place. However, maintaining social cohesion through culture can be challenging in rapidly changing societies, where external influences and modernization may shift cultural values. Balancing cultural preservation with adaptation becomes essential to sustaining cohesion while embracing progress. Thus, group cohesion is much needed to survive in the 'others place'. Marriage within the same group can be one process through which outside influences can be reduced.

A	Marriage Within the same Group (<i>Hela-Hela</i>)		122(91.04)
	Marriage Outside the group (<i>Hela-Others</i>)		12(8.96)
B.	Consanguineous marriage		122(91.04)
		a. First cousin marriage	118(97.7)
		i. Father's Brother's Daughter (FBD)	50(42.4)
		ii. Mother's Brother's Daughter (MBD)	68(57.6)
		b. Second cousin marriage	4(3.3)
	Non consanguineous marriage		12(8.96)
Total			134(100.0)

Table 5: Marital preference of the studied population

Figures in parentheses indicate percentage

Distance among	Number of marriages	Distance (K.m)
Within the study area	53(39.55)	0.0
Study area to Uttar Pradesh	75(55.97)	724.0
Study area to other parts of Kolkata	6(4.48)	5.0
Total	134(100.0)	

Table 6: Marital Distance

Figures in parentheses indicate percentage

Reproductive behaviour

We assessed the reproductive behavior of the study population by considering fertility, age-specific fertility rate, and infant mortality rate. Table 7 shows the fertility rate of the studied *Hela* population was 2.3, which was higher compared to the neighboring native *Bengali* population. However, it showed similar fertility trends to their ancestral places i.e., Mirzapur and Varanasi. Kolkata shows lowest level of fertility in India (Ghosh, 2016). Surrounded by an urban population in Kolkata's elite region in Bullygunge, the *Hela* community maintained the fertility pattern with their ancestral places. It reflects their demographic affinity with their ancestral place in Uttar Pradesh. An increasing number of members in a population is one kind of strategy to survive in new places. As a result, several studies show higher fertility among the migrant group (Stonawski et al. 2015; Kalam and Roy, 2015). Another important finding was that having male child in a family was very important because of ritualistic performance after death (which is called *Mukhagni* in Hindu ritual). The families among *Hela* continue to have three or four girl children to have at least one child (Kalam et al. 2020). It results into higher sex ratio found (Table 2) among them as well as high fertility.

Table 7 illustrates the mortality pattern within the *Hela* community, which shows similar trends in mortality to their ancestral places despite living alongside urban elite Bengali neighbours. The elite Bengali population exhibited a lower mortality rate.

This raises the question of why fertility and mortality trends still mirror those of their ancestral places, even while living among neighbours with low fertility and low mortality rates. The answer likely lies in their social and cultural ties to their ancestral places, which help maintain similar trends. Living in a close-kin community, the *Hela* people primarily interact with each other before engaging with their neighbours. Consequently, cultural influences compel them to adhere to ancestral patterns.

Table 8 shows the age-specific fertility rate of the *Hela* community. It shows *Hela* women had the highest fertility rate at 24 years of age, with a decline in fertility after 25 years of age (Figure 2). The median age of last pregnancy was 29.9 years, suggesting that *Hela* women typically completed their fertility by the age of thirty. After turning thirty, the women in this community focused on earning money through household work and other tasks. Their ability to earn a living daily may have been hindered by pregnancy and childcare responsibilities. The women strongly believed that completing their fertility at a young age was crucial from both a social and economic perspective. Being pregnant at an older age reduced their social prestige because it was not socially and mentally acceptable within the community.

A participant of age 34 years said, *‘My husband is a daily labourer, and I work as a maid in our neighbour house who are Bengali doctor. When I was pregnant and had to stop working, they stopped paying me, which affected my life and health.’*

Another women of same age group said, *‘Pregnancy after thirty years of age is discouraged in our community. It can negatively impact our work as homemaid. Therefore, it is important to avoid pregnancy as early as possible.’*

Among the *Hela*, pregnancy at and/or after thirty years of age was often seen as shameful act. There is a prevailing belief that such a pregnancy represents a diversion from societal norms or expected life paths. This belief reinforces a negative social stigma, making women who become pregnant after thirty feel isolated or judged. The shame is not only internal but also manifests in their interactions with their peer group, where maintaining eye contact may feel uncomfortable, as it can be perceived as a reflection of their non-conformity to social expectations.

A participant who got pregnant at 32 years of age shared her experience as, 'I was stayed in my home for six months meeting no one. Only my family member knew that. They too were uncomfortable with me. I was sent to my parental home in Uttar Pradesh. After delivery of my son, when i came back i feel ashamed to talk with my peers. However, slowly the situation changed and other accepts it.'

Variable	Hela population (Kolkata)	Kolkata West Bengal (RGI 2022)	In Mirzapur, Varanasi, UP
Fertility	2.3	1.2	2.6, 4.2
Mortality	96.7	41.0	80, 89.2

Table 7: Fertility and mortality among the Hela community

Age (in years)	Number of wedlock women	Number of live births							
		15 -19	20 -24	25 -29	30 -34	35 -39	40 - 44	45 +	Total
15-19	13	0.77(10)							0.77(10)
20-24	22	0.50(11)	0.59 (13)						1.09(24)
25-29	17	0.70(12)	0.58(10)	0.52 (9)					1.82(31)
30-34	20	0.85(17)	0.85(17)	0.6 (12)	0.3 (6)	0.35(7)			2.95(59)
35-39	18	0.77(14)	1.00 (18)	0.65(11)	0.22 (4)	0.11(2)	0.11(2)		2.83(51)
40-44	16	1.00(16)	0.93 (15)	0.75(12)	0.68(11)	0.31(5)			3.68(59)
45+	28	(0.35)10	0.64(18)	0.92(26)	0.46(13)	0.25(7)	0.07(2)	-	2.71(76)
<i>Total</i>	<i>134</i>	<i>0.67(90)</i>	<i>0.68 (91)</i>	<i>0.44(70)</i>	<i>0.25(34)</i>	<i>0.10(21)</i>	<i>0.01(4)</i>	-	<i>2.31(310)</i>

Table 8: Age specific fertility structure of the population

Figures in parenthesis indicates number of livebirths

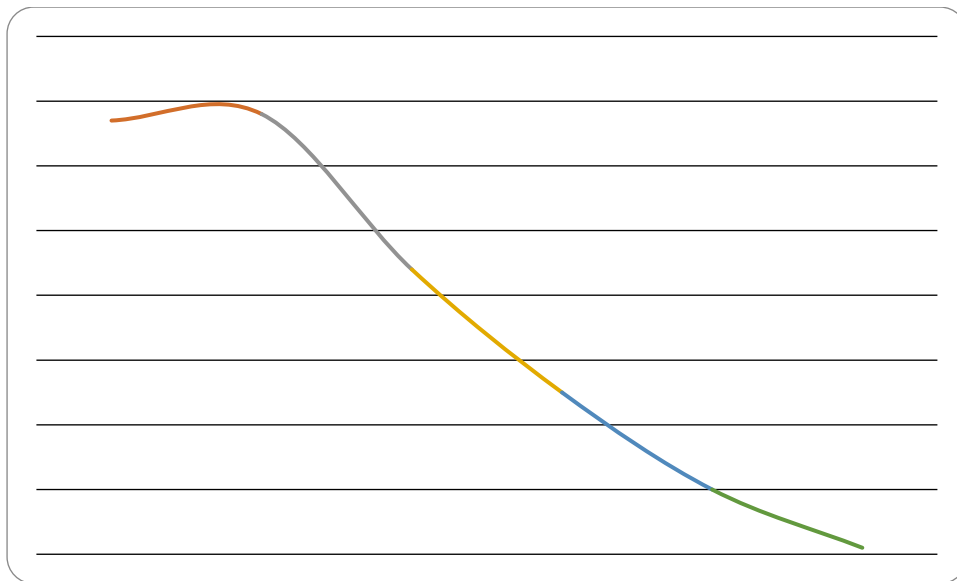


Figure 2: Age-specific fertility among the Hela population of Kolkata

Variables	Median age at first marriage(years)	Median age at first child Birth (years)	Median age at last pregnancy(year)	Mean differences in fist and last child birth
Females	18.01	18.9	29.9	9.9±2.3

Table 9: Median ages at first and last pregnancies of the Hela female population in the study area

Index of opportunity for selection

The selective fitness of a population depends upon the reproductive efficiency and fertility of the population member and the offspring's survivability (Barua 2007). J.F. Crow (1958) devised a selection intensity index to measure the maximum potential of selective fitness by using differential fertility and mortality (Equation I). In the present study, Table 10 shows that the fertility index (0.550) was higher than the mortality index (0.107). This suggests that improved living conditions and a better healthcare system may be responsible for a lower impact on mortality. Rajanikumari et al. (1985) found that in most Andhra caste populations, fertility has a greater impact

than mortality on selection. In this population as well, the trend was similar, with the lower impact of mortality on fertility being attributed to improved living conditions and healthcare systems after migrating from their ancestral place to urban areas of Kolkata. The total selection intensity index was 0.716 which is comparatively lower compared to other population studied by Reddy and Chopra (1990) among *Palle* population ($I_t=0.94$), Sirajuddin (1984) among *Chenchu* population ($I_t=1.45$), and higher compared to study by Kalam et al. (2015) among *Darbhangia Khotta* ($I_t=0.405$), Sohkhlet (2013) among the Gowda population ($I_t=0.470$). This result highlights the importance of natural selection in shaping genetic variation. When the total selection intensity index is zero, there will be no genetic makeup change due to selection (Livingstone et al 1965). Further research will be helpful to shed more light on the connection between fertility and mortality indices and their contribution to the evolutionary pattern of this population through natural selection after migration.

Components of index opportunity for selection	Values of the components
Number of women	134
Number of live births	310
Mean live birth($\bar{X}$)	2.3
Variance live birth (V_f)	2.9
Pre reproductive mortality	30
Proportion of death before the age 15 years (P_d)	0.097
Proportion of survival after 15 years age (P_s)	0.903
Index of mortality ($I_m = P_d/P_s$)	0.107
Index of fertility ($I_f = V_f/\bar{X}^2$)	0.550
Index of opportunity for selection ($I_t = I_m + I_f/P_s$)	0.716

Table 10: Index of opportunity for selection

Conclusion

Our research focuses on the anthropological demographic profile of the migrant *Hela* community, which lives in a ghetto near Ballygunge, an urban and elite area in Kolkata, West Bengal. The study revealed that the community members largely practice group endogamy, and all marital alliances were consanguineous. The recorded fertility was above the replacement level, with a high mortality rate, and the selection intensity calculated for this population was comparatively low. An ethnographic account of this community would help to understand the role of gender, culture, and economy in delineating the demographic profile of the *Hela* group. However, a small sample size might be a limitation of this study, but the study to understand culture and its effect on population might not depend on the sample size. Although, comparing this group with a sub-sample drawn from the ancestral population living in Mirzapur and Varanasi districts of Uttar Pradesh would provide a better picture of continuity and change in the demographic profile of the *Hela* population.

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Data availability: The study is a small part of demographic research on migrant communities of West Bengal.

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