

Selection Intensity in Koras : A Little Known Community of West Bengal

Upali Basu¹, Debashis Basu², C.S. Singhrol¹

1. Department Of Anthropology, Ravishankar University, Raipur 492 001, Madhya Pradesh, India

2. Anthropological Survey of India, Shillong 793 001, Meghalaya, India

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ABSTRACT The present study gives the information about the average number of livebirths per ever - married Kora woman aged 40 years and above which appears to be ($\bar{X}$) 5.80 and its (V_p) is 7.82. The mean number of livebirths to women of all ages and the total number of premature death (P_p) is 3.31 ± 0.10 and 28.57 %. The number of stillbirths and abortions are 7.10% to the total number of mothers conceived (467). It is also apparent that the mortality component (I_m) is higher than the fertility component (I_f). The selection pressure is moderate among the Koras.

INTRODUCTION

The Koras inhabit in the south eastern part of Midnapore district. The term Kora is derived from their occupation and is not a generic term. Their is no clue to warrant their tradition say that they came from Chotanagpur plateau, while their name suggests a Dravidian origin and it seems possible that they may be an offshoot of Munda tribe, who some how sank from the status of independent cultivators to their present position of earth cutting and labourers (Risely, 1969).

In the present paper, the index of natural selection (I_s), with its fertility (I_f) components have been worked out.

MATERIAL AND METHODS

A demographic survey on fertility, mortality and other genetical traits were undertaken on this tribe from seventeen villages in Midnapore district during the month of June - August, 1986 and February - April, 1987. Data on demographic variables were collected by retrospective method using struc-

tured schedules from 405 households.

RESULTS AND DISCUSSION

Table 1 gives the total selection intensity (I_s) according to Crow (1958) and Johnston and Kensinger (1971). It appears that the average number of live births per ever - married woman aged 40 years and above ($\bar{X}$) is 5.80 and its variance (V_p) is 7.82. The mean number of live births to women of all ages and total number of premature death (P) is 3.31 ± 0.10 and 28.57 %, respectively. The number of still births and abortions are 7.10% to the total number of mothers conceived (467). It is also apparent from the

Table 1 : Crow's index of opportunity of selection among the Koras

Particulars	Values
No. of women aged 40 years and above	151
No. of live births	875
No. of survival to 15 years of age	678
Proportion surviving (P_s)	0.774
Proportion dead (P_d)	0.226
Mean live births ($\bar{X}$)	5.80
Variance of live births (V_p)	7.82
Index of mortality (I_m) = P/P_s	0.291
Index of fertility (I_f) = $V/\bar{X}^2$	0.232
$I_s = I_m + I_f/P_s^2$	0.590
$I_s = I_m + I_m/P_d + I_f/P_s P_s^2$	0.639

1. After Crow (1958)

2. After Johnston and Kensinger (1971)

same table that the mortality component (I_m) is higher than the fertility component (I_f).

Table 2 exhibits comparative account of various component of selection intensity in other tribal populations of West Bengal. It is evident from this table that the mortality component (I_m) is also higher than fertility

Table 2 : Selection intensity (according to Crow, 1958) and its components in other tribal groups of West Bengal

Population	No. of Women	Mean Live births (X)	Variance Of live births (V _f)	Per cent died/ 15 yrs	I _m	I _f	I _s	Source
Lepcha	-	7.00	22.75	23.2	0.297	0.464	0.899	Mukhopadhyay (1982)
Lepcha	-	5.83	9.99	10.0	0.111	0.294	0.438	Mukhopadhyay (1982)
Gangu	124	0	0	33.4	0.500	0.460	1.190	Bhattacharya (1985) ¹
Pahira (North)	39	4.97	4.33	44.9	0.815	0.175	1.133	Basu (1967)
Pahira (Southern I)	50	5.44	4.05	34.6	0.529	0.137	0.738	Basu (1967)
Pahira (Southern II)	50	5.70	4.45	32.5	0.484	0.137	0.687	Basu (1967)
Sherpa	-	7.44	9.36	17.2	0.206	0.173	0.415	Gupta (1980)
Sherpa	-	4.53	6.15	-	0.152	0.300	0.498	Gupta (1980)
Toto	40	7.83	5.82	24.1	0.320	0.100	0.350	Debnath & Sen (1983)
Kora	151	5.80	7.82	22.6	0.291	0.232	0.390	Present study

1. Unpublished

component (I_f) in other tribal populations unlike the Koras except with the Lepchas (Mukhopadhyay, 1981) who show the reverse situation.

The index of total selection intensity (I_t) (Table 1) in Koras show more or less close similarity in values obtained by the method proposed by Crow (1958) and Johnston and Kensinger (1971). It is closer to the bottom range (0.6-3.7) reported by Spuhler (1962) among ten tribal populations and in the intermediate position for the values (0.258 - 1.687) calculated for 96 Indian populations (Reddy and Chopra, 1990). It seems, therefore, that selection pressure is acting with moderate intensity among the Koras.

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