

A Study on the Mode of Some Behavioural Characters of Vannekula Kshatriya in Andhra Pradesh, India

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ABSTRACT The Vannekula Kshatriya, an endogamous caste population living in Chittoor district of Andhra Pradesh was studied for behavioural traits, hand-clasping, arm-folding and handedness. A preponderance of right hand-clasping and right handedness were observed among males and females, whereas the frequency of right arm-folding was greater only among females. No character exhibited significant bisexual difference.

INTRODUCTION

Certain parts of our body show a kind of functional importance of asymmetry (Reiss et al., 1997). Lutz (1908) first noticed the dimorphism of clasping the hands in man and postulated a genetic basis for the trait. The pattern of association between hand clasping and sex was established by Freire-Maia et al (1961). Similar dimorphism in arm-folding was first reported by Weiner (1932). Investigations carried out on handedness revealed that the trait functional asymmetry is partially genetically controlled (Rhoads and Damon, 1973).

In India, it may be generally acknowledged the fact that studies concerning hand-clasping, arm-folding and handedness are rather limited particularly in Andhra Pradesh (Bhasin et al., 1992). Therefore, considering the dearth of data, the present study was undertaken to investigate the range of bilateral variation with regard to hand-clasping, arm-folding and handedness among the Vannekula Kshatriya caste population of Andhra Pradesh.

SUBJECTS AND METHODS

The sample consisted of healthy unrelated Vannekula Kshatriya caste subjects of Bandapalli and Chinabandapalli villages of the Chittoor district of Andhra Pradesh. The field works for the present study was carried out in 1984 and 1985 and the total number studied was 215 subjects, of which 125 were males and 90 females aged 15-64 years. Proper care was taken on each case while collecting the data on the type of right or left handedness, hand-clasping and arm-folding.

RESULTS AND DISCUSSION

Table 1 shows that among the Vannekula Kshatriya in both the sexes right type of hand-clasping (male 57.6%; female 57.8%) dominates over the left type (male 42.4%; female 42.2%). The sexual difference is statistically not significant as is expected in case of any autosomal trait. The frequency of left arm-folding in males is overwhelming (59.2%), while in case of females it is 46.7%. However, no statistically significant differences were observed suggesting similarities between the sexes.

Table 1: Distribution of behavioural traits among Vannekula Kshatriya

Sex	Number	Hand Clasping		Arm Folding		Handedness	
		Right	Left	Right	Left	Right	Left
Male	125	57.6 (72)	42.4 (53)	40.8 (51)	59.2 (74)	90.4 (113)	9.6 (12)
Female	90	57.8 (52)	42.2 (38)	53.3 (48)	46.7 (42)	87.8 (79)	12.2 (11)
χ^2 (df=1)		0.0008 P>0.05		3.3446 P>0.05		0.4768 P>0.05	
Total	215	57.7 (124)	42.3 (91)	46.0 (99)	54.0 (116)	89.3 (192)	10.7 (23)

Figures in parenthesis are numbers observed.

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With regard to the handedness, the frequency of right handedness is maximum (90.4%) among males and 87.8% among females. But this trait shows insignificant difference between the sexes. This character has been studied for the first time for the frequency distribution in Chittoor district and no published data are available for comparison.

The frequency of right hand-clasping is the highest (69.0%) among Viswa Brahmin, whereas the lowest frequency (41.0%) is found among Yadava (Parvatheesam, 1995). The Madiga shows the highest incidence (58.5%) of right arm-folding (Reddy, 1984) and the lowest value (31.0%) is found in the Niyogi Brahmin (Sreenath, 1981). It has also been observed that Vannekula Kshatriya show significant differences with some of the neighbouring populations (Ediga, Gajula Balija, Madiga, Niyogi Brahmin, Pattusali, Viswa Brahmin and Yadava) for hand-clasping and for arm-folding.

It is apparent from this investigation that Vannekula Kshatriya show homogeneity with their counterparts in Andhra Pradesh in respect of be-

havioural traits hand-clasping and arm-folding.

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