

GENDER DIFFERENCES IN PROFILE OF STREET-BASED CHILDREN IN THANE, MAHARASHTRA**Rucha Wagh¹, Rupali Gajare^{2*}, Sandhya Khadse³, Sundaram Kartikeyan⁴ and Srabani Bhattacharya⁵**¹Assistant Professor, Physiology Department, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India.²Assistant Professor, Anatomy Department, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India.³Dean, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India.⁴Professor and Head, Community Medicine Department, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India.⁵Professor and Head, Physiology Department, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India.***Corresponding Author: Dr. Rupali Gajare**

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ABSTRACT

This cross-sectional, comparative study was conducted in the city of Thane in Western Maharashtra to compare the gender differences in profiles of street-based children (both genders, aged between 12 and 18 years) who were staying with their families and were enrolled in a school run by a non-governmental organization. Convenience-based sampling was used due to non-availability of a sampling frame of street children in the study area. The gender differences in mean age ($Z=0.667$; $p=0.498$), mean height ($Z=0.618$; $p=0.536$) and mean weight ($Z=1.322$; $p=0.815$) were not significant. Though all the participants were enrolled in a NGO-run school for street children, only 2 (06.25%) boys and 4 (10.53%) girls attended the school for more than 3 days a week. The gender difference was not significant ($Z=0.636$, $p=0.522$) for school attendance, but was highly significant ($Z=5.232$, $p<0.001$) for self-reported ability to remember what was taught at school. As compared to boys, a significantly higher number of girls reported a feeling of loneliness ($Z=2.639$, $p=0.0083$) and difficulty in communicating ($Z=4.845$, $p<0.0001$). A multiple-level intervention strategy ought to focus on rehabilitation of street-based families, social security, establishing more night shelters for providing food, health care and shelter and providing avenues for legal income.

KEYWORDS: Gender, Profile, Street-based children.**INTRODUCTION**

Street children are underprivileged urban children who are impoverished, deprived of education, vulnerable to various types of abuse, inadequately supervised by adults, who have varying status of street-based existence and contact with their families. These underprivileged and neglected children constitute that part of our new generation, which will cause burden and problems in the years to come unless sustainable interventions are undertaken. Many non-governmental organizations (NGOs) are providing various facilities including day care centres and open houses for these children.^[1]

Article 1 of the UN Child Rights Convention, adopted by the UN General Assembly in 1990, defines all those up to 18 years of age as children.^[2] Most of international agencies follow this definition. However, various legal provisions in India address children with differing definitions. The age of child has been defined to be below 18 years as per Juvenile Justice (Protection and Care of Children) Act, 2000. As per The Factories Act

(1948), an adolescent between 15 and 18 years can be employed in a factory only if he obtains a certificate of fitness from an authorized medical doctor.^[2] Thus, Indian law does not prohibit the involvement of children between 15-18 years in income-generating activities.

Street children in the developing countries outnumber their counterparts in the developed countries, with widely varying estimates of the number of street children.^[3] Estimating the number of street children living in India is a complicated activity due to repeated changes in their places of residence and workplaces and their drifting lifestyles.^[4] These street children inhabit public spaces (such as, parks, bus stations, flyovers and bridges, railway platforms, market places, footpaths) and use railway lines or road side ditches for defecation; bathing is seldom done since they do not have access to water supply and sanitation.^[5]

The objective of this study was to compare the gender differences in profiles of street-based children who were

staying with their families and were enrolled in a NGO-run school.

MATERIALS AND METHODS

This cross-sectional, comparative study was conducted in the city of Thane in Western Maharashtra. After getting approval from the respective NGOs for conducting the study, the purpose of the study was explained to the prospective participants, elders and local stake holders and it was clarified that the participants would not receive any incentive in cash or kind. Convenience-based sampling was used due to non-availability of a sampling frame of street children in Thane city and because of intricacies involved in locating street children who would be willing to participate in the study. The study included children (both genders) aged between 12 and 18 years, who were enrolled in a NGO-run school, for whom “the street” had become home and/or their source of livelihood for more than one year, who were staying with their families on the street. After obtaining consent of elders and the participants themselves, the interviews were conducted using a pre-tested and validated questionnaire at the daily habitat of the participants so that their routine would not be disturbed.

Height of participants was measured in centimetres, with a measuring tape hoisted on a vertical wall, with the participant standing in erect position without shoes or headgear with head in Frankfort plane, feet together, heels, buttocks and upper part of the back touching the hoisted measuring tape.^[6] Body weight was measured in kilograms, before lunch, using a pre-calibrated digital weighing scale (OMRON Healthcare India Pvt. Ltd., Gurgaon, Haryana), with the participant standing evenly on both feet without footwear, wearing normal indoor clothing.^[6] General and systemic clinical examination was performed with the consent of their elders and the respective authorities.

The data were tabulated in Microsoft Excel (Microsoft Corporation, Redmond, WA, USA) and statistically analyzed using EpiInfo Version 7.0 (public domain software package from the Centers for Disease Control

and Prevention, Atlanta, GA, USA). Categorical data were presented as percentages and continuous data as mean and standard deviation (SD). 95% Confidence interval (CI) was stated as: [Mean-(1.96)*Standard Error] - [Mean + (1.96)* Standard Error]. Statistical significance of difference (taken as p-value<0.05) was calculated using standard error of difference between two means and standard error of difference between two proportions.

RESULTS AND DISCUSSION

Demographics

In the present study, the respondents were living with their families. A total of 70 respondents (32 boys: 45.71%; 38 girls: 54.29%) participated in the study. The mean age for boys was 12.44 ± 1.79 years (95% CI: 11.82–13.06 years), while that for girls was 12.74 ± 1.91 years (95% CI: 12.13–13.35 years). The maximum, third quartile, first quartile and minimum age was identical in both genders but the median age was 13 years for girls and 12 years for boys (Fig-1). However, the gender difference in mean age was not statistically significant ($Z=0.667$; $p=0.498$). The occupational profile is depicted in Table-1. The average daily income of most beggars exceeds that of daily wage earners (making this a lucrative “occupation”) and that a child’s income through begging accounted for about one-third of the total household income.^[7]

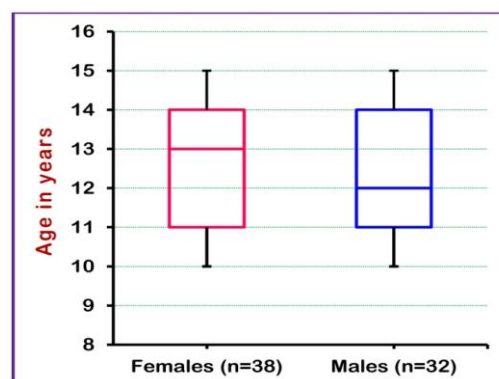


Fig. 1: Box Plot of Age Distribution.

Table 1: Occupational Profile.

Parameters		Boys (n=32)	Girls (n=38)	Z value	'p' value
Parental work	Begging	9 (28.12%)	10 (26.32%)	0.169	0.865
	Unskilled labour	12 (37.50%)	4 (10.53%)	2.677	0.007 *
	Selling at signals	7 (21.88%)	19 (50.00%)	2.426	0.015 *
Mother: Domestic Maid		4 (12.50%)	5 (13.15%)	0.081	0.936
Child's work	Begging	30 (93.75%)	36 (94.74%)	0.177	0.857
	Unskilled labour	2 (06.25%)	2 (05.26%)	0.177	0.857

Z = Standard error of difference between two proportions; * Significant

Though all the participants were enrolled in a NGO-run school for street children, only 2 (06.25%) boys and 4 (10.53%) girls attended the school for more than 3 days a week. The gender difference was not significant ($Z=0.636$, $p=0.522$). There was no significant gender difference ($Z=0.266$, $p=0.787$) in the number of

participants – 30 (93.76%) boys and 35 (92.10%) girls – who mentioned that they “disliked” going to school. 8 (68.75%) boys and 33 (86.14%) girls revealed that they remembered what was taught to them at school. The gender difference was highly significant ($Z=5.232$, $p<0.001$). There was no significant gender difference

($Z=0.519$, $p=0.603$) in the number of participants – 12 (37.50%) boys and 12 (31.58%) girls – who mentioned that they had difficulty in studying. A study,^[8] conducted in Mumbai and Kolkata, reported that such street-based children were prone to lose their books and stationery since they were provided by NGOs and that this behavior arose because the streets did not support their education or their well-being.

Anthropometry

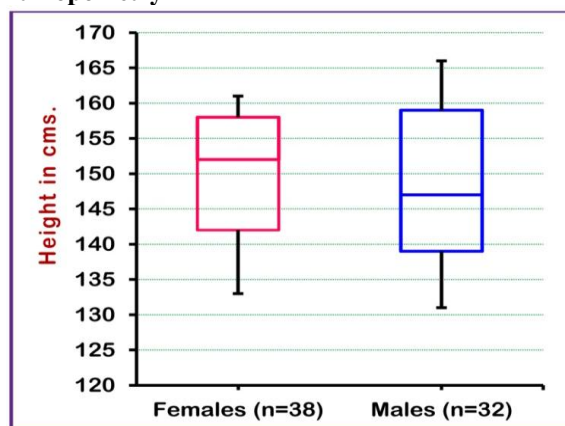


Fig. 2: Box plot of height.

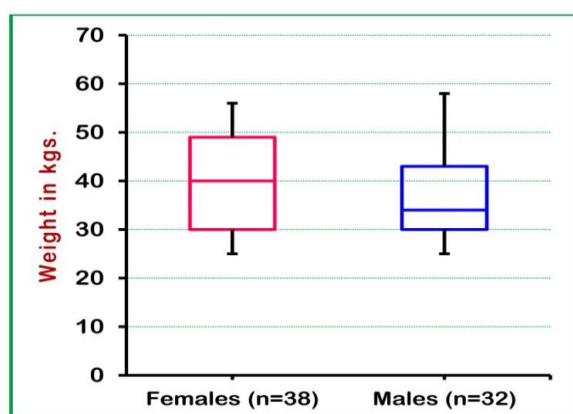


Fig. 3: Box plot of weight.

The mean height of boys was 148.03 ± 10.78 cm (95% CI: 144.30–151.76 cm) while that for girls was 149.53 ± 9.25 cm (95% CI: 146.59–152.47 cm). The maximum and third quartile of height was higher for boys as compared to that of girls, but the median, first quartile and minimum height was lower for boys (Fig.2). The gender difference in mean height was not significant ($Z=0.618$; $p=0.536$). The mean weight was 37.13 ± 9.26 kg (95% CI: 33.92–40.34 kg) and 40.05 ± 9.13 kg (95% CI: 37.15–42.96 kg) for boys and girls, respectively. The gender difference in mean weight was not significant ($Z=1.322$; $p=0.815$). The third quartile and median weight was higher for girls as compared with that of boys. The first quartile and minimum weight was identical (Fig.3).

A study,^[9] from Dhaka, Bangladesh, reported that the skin fold thickness of street children was significantly more than that of slum children and attributed their findings to the possibility of biologically fitter children surviving on the streets. A Mumbai-based study^[1] reported that the anthropological measurements of street children were higher than that of children from a NGO-run open house.

Dietary patterns

The dietary pattern is depicted in Table-2. The gender differences were not significant.

Table 2: Dietary Patterns.

Parameters	Boys (n=32)	Girls (n=38)	Z value	'p' value
Breakfast before 9 AM	17 (53.12%)	16 (42.11%)	0.920	0.357
Breakfast >5 days / week	13 (40.62%)	17 (44.74%)	0.346	0.726
>5 meals/week with family	12 (37.50%)	16 (42.11%)	0.391	0.696
Vegetarian diet	16 (50.00%)	24 (63.15%)	1.108	0.267
No food at times	25 (78.12%)	31 (81.57%)	0.359	0.718
Food cooked by family	22 (68.75%)	33 (86.14%)	1.837	0.065

Z = Standard error of difference between two proportions

Psycho-social profile

The psycho-social factors are depicted in Table-3. As compared to their male counterparts, a significantly higher number of girls reported a feeling of loneliness ($Z=2.639$, $p=0.0083$) and difficulty in communicating ($Z=4.845$, $p<0.0001$). The respondents did not reveal substance abuse (harmful or hazardous use of psychoactive substances, including alcohol and illicit

drugs). This was probably because the respondents were children of street families who lived and worked with their families on the street and were still under parental supervision. Since they had to hand over their daily income (from begging or unskilled labour) to their parents, it is possible that they had no extra money to indulge in substance abuse. Only 2 boys (6.25%) and 4 girls (10.53%) received "pocket money"

from their parents (Table-3), which was usually spent in buying food or trinkets from street-based vendors.

Table 3: Psycho-Social Profile.

Parameters		Boys (n=32)	Girls (n=38)	Z value	'p' value
Adequate sleep		10 (31.25%)	13 (34.21%)	0.262	0.794
Feeling of loneliness		02 (06.25%)	12 (31.58%)	2.639	0.0083 *
Feeling insecure		09 (28.12%)	05 (13.16%)	1.559	0.118
Closest relationship	Friends	15 (46.88%)	19 (50.00%)	0.260	0.794
	Mother / Siblings	09 (28.12%)	07 (18.42%)	0.963	0.337
	None	08 (25.00%)	12 (31.58%)	0.607	0.541
Receives pocket money		02 (06.25%)	04 (10.53%)	0.636	0.522
Gets irritated at school or home		27 (84.37%)	31 (81.58%)	0.309	0.756
Quarrels: school or neighbours		28 (87.50%)	36 (94.73%)	1.077	0.280
Difficulty in communicating		12 (37.50%)	35 (92.10%)	4.845	<0.0001 *

Z = Standard error of difference between two proportions; * Significant

Health profile

Table 4: Health Profile.

Parameters	Boys (n=32)	Girls (n=38)	Z value	'p' value
History of asthmatic attacks	01 (03.12%)	02 (05.26%)	0.440	0.659
Skin diseases	01 (03.12%)	05 (13.16%)	1.493	0.136
Polio deformity	02 (06.25%)	01 (02.62%)	0.744	0.459
Malunion of fracture	02 (06.25%)	04 (10.53%)	0.636	0.522

The gender differences in the health profile (Table-4) were not significant. A Pakistan-based study^[10] reported that street children preferred self-medication because of long waiting time, financial constraints and self-perceived negative attitude of health care providers.

The limitations of this study were that convenience sampling was used and it was not possible to verify the responses given by the respondents.

CONCLUSION

Street-based children require a range of social services, education and health care. Preventive efforts ought to focus on improving income levels and housing of impoverished families and providing educational and health care facilities. A multiple-level intervention strategy ought to begin with the rehabilitation of street-based families, who must be provided with social security to stop children from working for incomes. For street-based children who are living with their families, the emphasis should be on establishing more night shelters for providing food, health care and shelter and providing avenues for legal income.

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