Socio-Economic Determinants of Street Children Category and Their Occupational Choice: Evidence from the Regional State of Oromia, Ethiopia

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Abstract

Street children in Ethiopia face complex and interwoven socio-economic problems and thereby became the most vulnerable groups of the population. In the backdrop of association between category of children and their occupational choice, this study attempts to identify the socio-economic factors determining the likelihood of children becoming a member of street children's group and their occupational choice. Sample respondents of 200 street children were collected using multi-stage sampling. The analysis used the Chi-Square test to study the association between category of children and their occupational choice. Empirical evidence on category-wise variation in street children characteristics suggests that some socio-economic factors (educational level, activities with friends, current friends, and distance of house from their service points) and means of livelihood are significantly associated with category of the street children. Finally, the qualitative response model was used and its results show family size, gender and punishment as the common identified socio-economic factors, which determine the category of street children and their occupational choice.

Keywords: Street children, Category of children, Livelihood strategy, Qualitative response model, Ethiopia

JEL Classification Codes: I31, C25

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1. Introduction

Street children (under the age of 18) occupied diverse means of livelihood in the street of urban town (Scanlon et al. 1998). UNICEF categorized them in three groups: "on the street" children who spend more of their time on the street, funding for themselves and their families but returning home on a regular basis (Ali and Ali, 2015); the second category is "of the street" children who spend most days and nights on the street and are surviving without family support; the last is "abandoned". These are children from street family (UNICEF classification). As "of" and "abandoned" street children are staying on the street for day and night, the degree of physical violence, harassment and other challenges also magnified.

Even though the problem of street children is understood as an urban phenomenon (Alam and Laha, 2016), the factors exacerbating the problem are originated, by and large, in the rural villages. Rural children migration to urban towns are not dominated by a single factor but caused by a combination of multiple interrelated push (age, gender, poverty, family disintegration, family size, violence at home, level of education, access of education) and pull factors (search for independence, urbanization-attractions of the cities, peer influences, etc.). A number of studies have reported a combination of factors because of which the children were joining the street. In Latin America (Scanlon et al. 1998) a change in the system of land ownership, growth of population, drought, growing unemployment, poverty, and physical and verbal violence are some among the various economic, social, and political factors. Whereas, in India, Bangladesh and Ethiopia the reasons might be job searching, peer influence, family disharmony, orphaned, poor family, alcoholic parents, attracted by city life etc. which leads them to join the street life (Bhaskaran& Mehta, 2011; Hai, 2014; Rahman et al., 2015; Habtamu, &Adamu, 2013; Lalor, 1999; Kebede, 2015; Ballet et al., 2010; Osmani, and Hossain, 2020).

In the existing literature, street children are observed as a common phenomenon in most urban cities in Africa (Aptekar, 1994; Kopoka, 2000; Ogan, 2021) mainly caused by the poverty (Sam, 2016; Byegon et al, 2021). However, empirical evidences on their occupational diversification are relatively scanty in the context of Africa and Ethiopia in particular. Gebretsadik (2017) analysed the nature of street work based on a small sample of 24 purposely selected street working children in Dilla town, Southern Ethiopia. However, this small sample based study narrated a qualitative analysis of the perception of street children without any consideration of category of children. Street children, however, are not a homogeneous category, rather different categories of children are linked with their occupational choice In a sequential choice model, the respondents choose a particular category depending on several socio-economic conditions. Thereafter, the respondents chose a particular livelihood strategy (i.e. occupation) depending on the category of street children. This study attempts to identify the socio-economic factors determining the likelihood of children becoming a member of street children's group in the study area. In addition, the study identifies some of the important factors in determining their likelihood of occupational choice.

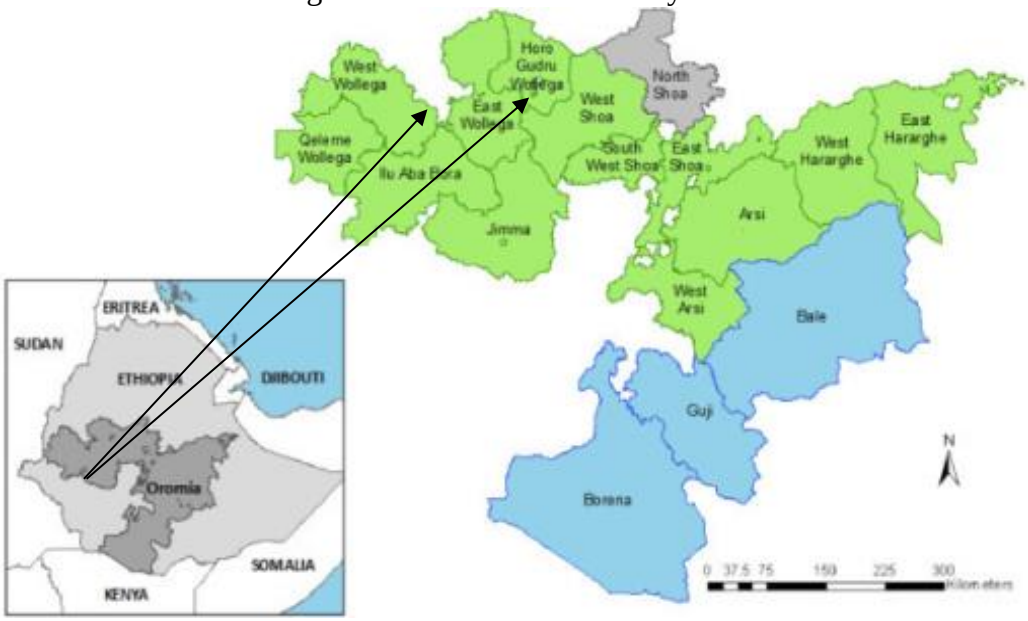
The outline of this paper is as follows. The next section deals with the data sources and methodology of the study. Selected regression models (Binary and Ordered Probit), list of explanatory variables and related hypotheses are considered. Section 3 explores the results relating to the impact of socio-economic variables on the likelihood of the street children category and their occupation choice as well as the interpretation of the result. Finally, the summary of the paper outcome is organized in the concluding section 4.

2. Data Sources and Methodology:

Data Sources:

The study is primarily based on the micro-empirical research study on the problems of street children in the regional state of Oromia, Ethiopia. However, the region of Oromia has been selected purposively as the problems of street children are significant in urban and rural areas of the region. In other words, coexistence of rural and urban region in the Oromia state facilitates in understanding the implications of migration from rural to urban areas on the problem of street children.

Figure 1: Location of the Study Area



In order to conduct the study in a representative way and to increase its reliability and validity, a multi-stage sampling technique is employed in the study. In the first stage, three towns from Oromia region (viz. Ambo, Guder, and Nekemte) have been selected. Out of these, a sizable representative of 200 street children is purposively selected in the second stage.

Methods:

Chi-Square Analysis

A test of independence by using Chi-square test is employed to examine the association between the categories of street children with other selected socio-economic variables of our interest. The Chi-square statistic can be written as:

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

where O_i = Grouped observed value of each variable, and E_i = Grouped expected value of each variable. In order to apply this χ^2 statistic the following steps has been performed:
First, on the basis of street children category with other variables, the following null hypotheses are formulated:

H_0: No relationship between the category of street children and selected independent variables.
Secondly, from our sample respondents of 200 street children, we have grouped the children in different categories and calculated observed and expected values along with the squared differences in between observed and expected frequencies of each independent variable are

also calculated. Sum of squared difference is then divided by calculated expected value to estimate χ^2 test statistic and appropriate degree of freedom (*df*) is selected. Finally, by comparing of calculated χ^2 values with critical value conclusions are usually drawn.

Qualitative response model

A qualitative response model is an econometric modelling in which the dependent (or regressand, or response) variable itself is qualitative in nature (Madalla, 1986). In a variant form of binary response regression model[1], the dependent variable is a binary or dichotomous variable (McFadden, 1973, Gujarati et al, 2013). In other words, qualitative variables become visible in the form of binary information: for instance a street child works as a street vendor or not. In econometrics, the qualitative nature of variable (binary variables) is most commonly called dummy variables.In defining a dummy variable, we must decide which event is assigned to the value one and which is assigned to the value zero. For example, in this study of determinant problems of street children, we might define occupational choice as a binary variable taking on the value one for street vendor and the value zero for those who are involved in other activities.

In the Binary Probit Model, we define a binary variable, say occupational choice (OCCU), as

OCCU = 0 if the children works as a street vendor

= 1 if others (multiple activities)

To determine the occupational choice, we assume, as before, an underlying response variable, OCCU*, defined by the following form of linear regression specification:

$$OCCU^* = \beta x + u \qquad (1)$$

Where $u \approx IN(0, \sigma_u^2)$. $OCCU^*$ is unobservable latent variable determined by the observed choice, such that OCCU = 0 if street vendor $OCCU^* \leq 0$

= 1 if others

The probabilities that the children is working as street vendor is defined as

$$Prob\ (OCCU = 0/x, \beta) = F(-\beta x) \qquad (2)$$

$$Prob\ (OCCU = 1/x, \beta) = F(\beta x) \qquad (3)$$

where F is the cumulative distribution function of u . The maximum log likelihood function is given by

$$L(\beta) = \sum_{ADD=0} ln\, F(-\beta x) + \sum_{ADD=1} ln\, F(\beta x) \qquad (4)$$

Marginal effects are estimated to indicate the degree or percentage change in estimated dependent variables due to the change in independent variable. The marginal effects are computed differently for discrete (i.e. categorical) (both dependent and independent variable(s)) and continuous variables (independent variable(s)). In binary independent variable(s), marginal effects measure discrete change (from 0 to 1), whereas marginal effects for continuous variables (independent variable(s)) measure the instantaneous rate of change that means the degree of change in dependent variable that will be 1-unit change in X_k (vales

[1] Binary response regression model was extensively applied in other research works, viz. Laha and Kuri (2010), Das and Laha (2017), Chatterjee and Laha (2019).

in variable i.e X=1,2,3,4,...k). In our study, for instance, if dependent variable is occupational choice (1 if vendor and 0 if others) and discrete (i.e. categorical) independent variable is current educational status (1 if attending school and 0 if dropout), then marginal effect implies the change in the probability of street vendor as an occupational choice (from 0 to 1) due to a change in the value of educational status (from 0 to 1).

On the other hand, a model is used to estimate relationships between an ordinal dependent variableand a set of independent variables. An ordinal variable is a variable that is categorical and ordered,for instance, children's living categorycan be ordered as 'on the street', 'of the street', and 'abandoned to the street'. In Ordered Probit, an underlying score is estimated as a linear function of the independent variablesand a set of cutpoints. The detail description of the qualitative responses of this model is stated as follows.

To consider the factors which are significant determinants of the category of the street children, a variety of qualitative response models can be suggested. Since the observed choice of contracts represent ordered or ranked categories, a suitable version of ordered qualitative response model is used to analyze the present problem. In the Ordered Probit model, a variable category (CHCAT) is defined as

CHCAT = 0 if they belonged to "on the street" children category
= 1 if the they belonged to "of the street" children category
= 2 if they belonged to "abandoned the street" children category

To examine the category of the street children, we assume that there is an underlying response variable $CHCAT^*$, defined by the following latent regression specification, $CHCAT^* = \beta^* x + u$ where the error term u is distributed normally with zero mean and unit variance. Here $CHCAT^*$ is unobservable latent variable determined by the observed value of the contract, CHCAT such that

$$CHCAT = 0 \; if \; CHCAT^* \leq 0$$

$$= 1 \; if \; 0 < CHCAT^* \leq \mu_1$$

$$= 2 \; if \; \mu_1 < CHCAT^* \leq \mu_2 \qquad (5)$$

where μ s are unknown parameters to be estimated with β . Since we assume μ is normally distributed across observations, we now have the following probability that the category of street children as

$$Prob\left(CHCAT = \frac{0}{x}, \beta, \mu\right) = F(-\beta x) \qquad (6)$$

$$Prob\left(CHCAT = \frac{1}{x}, \beta, \mu\right) = F(\mu_1 - \beta x) - F(-\beta x) \quad (7)$$

$$Prob\left(CHCAT = \frac{2}{x}, \beta, \mu\right) = F(\mu_2 - \beta x) - F(\mu_1 - \beta x) \quad (8)$$

where F is the cumulative distribution function of u. The threshold values μ s are estimated along with the β coefficients by maximizing the log likelihood function:

$$L(\beta,\mu) = \sum_{CHCAT=0} ln\left(F(-\beta x)\right) + \sum_{CHCAT=1} ln\left(F(\mu_1 - \beta x) - F(-\beta x)\right) + \sum_{CHCAT=2} \ln\left(F(\mu_2 - \beta x) - F(\mu_1 - \beta x)\right) \qquad (9)$$

Result of the maximum log likelihood function is obtained by using sophisticated statistical software, which uses analytic second derivative methods to obtain parameter and variance matrix of the estimated coefficient estimates.

The expected signs for variables determining the problems of street children are summarized in the table1. In empirical estimation procedure, our particular interest is to verify whether the result corresponds with the expected sign of the parameter or not. The observed Binary and Ordered Probit analysis estimates may be different in the specification of regressions.

Table 1: Operational Definitions and Expected Relationship of Variables in Binary and Ordered Probit Regression Model

Variables	Abbreviation	Value	Expected Sign of the Dependent Variables (Hypotheses)	
			Children category	Occupation
Family size	FSIZE	Continuous	Negative	Negative
Age of the respondent	AGE	Continuous	Negative	Negative
Gender	GEND	Boys -1 Girls -0	Negative	Negative
Current level of education	CEDULEV	Years of schooling	Positive	Positive
Family previous occupation	FPROCCPN	Street Vender-1 Others -0	Negative	Positive
Distance of the school	SCHDIS	Continuous	Positive	Negative
Person punished the children	PPUNCH	Parents-1 Others-0	Positive	Negative
Discrimination	DSCR	Discriminate -1 Not Discrm-0	Positive	Positive

3. Results and Discussion

Category wise Demographic Profile

As long as the association between their category (On the street, of the street and abandoned) and age of sample respondents in the study area is concerned, the result of the survey showed that the majority portion of 'on the street children' (53.51%) and 'of the street children' (56%) category belongs to the same age category (14-18 years old) respectively. The Pearson Chi-

square value does not suggest any significant relation between age and categories of street children.

A total of 133 boys and 67 girls had participated in the primary survey. As long as the gender-wise category of the children is concerned, it indicates that gender wise difference is not present in the category of 'on the street' children. Even though a little difference is observed in other two categories of street children, but overall the result fails to reject the hypothesis of independence between gender and children category.

Participants' level of education is also summarised in table 2. Majority of the street children of the three different categories did not complete high school. As evident, 77.19% of 'on the street', 94% 'of the street' and 77.78% of the abandoned children did not complete high school. Test result shows that level of education of the respondents is associated with category of children at the 5% level of significance.

Activity status of the street children before habituating with the street life may determine the category of street children in future. It is evident that the greater portion (56.14%) of children working 'on the street' were habituated with studying schedule, while 90% of children 'of the street' category were involved in playing. As far as comparing the groups on the basis of scheduling times with friends is concerned, the majority (75%) of the children of the abandoned category were interested in going to the street. That is why, they were from family of the street and they also followed the habit of their family and street kids. The result of the Chi-square test also establishes a significant relationship between the activities with friends and children category in the study area.

Considering the relationship between friend circle and the children category, empirical result shows that the majority of the children working on the street have both street and non-street children friends. However, children who belong to 'of the street' and abandoned groups were familiar with only street kids' friends. A significant association indicates that their working as well as living environment have contributed in deciding on their friends.

Table 2: Children Category wise Demographic Profile

Determinant factors	Children Category						χ^2
	On the street (n=114)		Of the street (n=50)		Abandoned (n=36)		
	N	%	N	%	N	%	
Age category							
Below-14years	53	46.49	22	44.00	18	50.00	0.303
14-18years	61	53.51	28	56.00	18	50.00	
Gender category							
Male	76	66.67	36	72.00	21	58.33	1.758
Female	38	33.33	14	28.00	15	41.67	
Educational level							
Complete high school	26	22.81	3	6.00	8	22.22	6.915**
Incomplete high school	88	77.19	47	94.00	28	77.78	
Activities with friends (Before)							
Studying	64	56.14	0	0.00	0	0.00	161.997***
Playing	49	42.98	45	90.00	9	25.00	
Going to street	1	0.88	5	10.00	27	75.00	
Friend circle							
Street children	2	1.75	50	100.00	35	97.22	188.049***
Both	112	98.25	0	0	1	2.78	
Distance of house from their farm land							
<2km	25	21.93	32	64.00	26	72.22	42.713***
>2km	52	45.61	10	20.00	7	19.44	
From school							
<3km	54	47.37	30	60.00	10	27.78	8.738**
>3km	60	52.63	20	40.00	26	72.22	

Source: Survey Data, 2016-17

Note: ** means p< 0.05; * means p< 0.1 and *** means p< 0.01.

The practice of parenting or childrearing often varies from country to country, due to their environmental, ecological, cultural and others aspects. In our survey area, punishment in the form of beating, depriving children of meeting friends and visiting relatives were seen popular in each of the sample region. Among them, depriving children of meeting friends shared the highest score, and it is followed by physical punishment (like, beating). One person or many of the family members were involved in the process of controlling behaviour of their child. Evidently, the result from children of three towns suggests that punishment often led by their father (44% of the cases), while in 56% of the cases, more than one person were involved in it. Also, it is seen that discrimination of children by their parents, teachers, or any member of the society has an adverse impact on their well-being.

The findings revealed that the distance of parents' farm land and school from their native home correlates with the category of street children. And 45.61% of children working on the street reported that their house was more than 2 km far away from their farm land, whereas majority of 'of the street' and abandoned children reported the distance as less than 2km. Likewise, on the distance of school from house, 52.63% of the 'on the street' group and 72.22% of abandoned groups reported as more than 3km, while 60% of the 'of the street' groups reported as less than 3km. The result showed that the distance between home to farm land and school are associated with the category of children.

Livelihood Strategies

Children on the street were compelled to work in vulnerable environment in the informal labour market for their own survival and their family (Osmani and Hossain, 2020). In Ethiopia, child work contributed to well-being of the family (Gebretsadik, 2017). In this survey of occupation of the children in Ethiopia six different livelihood strategies adopted by the childrenwere

identified : Street vender (72.5%), wood work (9%), shoe shining (7%), painter (7%), Knitting (2.5%), and Daily labour (2%). Among them, a large size of respondents was occupied with street vender whereas too small respondents were involved in daily labour occupation. Similarly, parents of the street children were occupied in different means of livelihood strategies. Three of the major occupational type was noticed: 44% of the respondents' family members were working as an employee, 34% of children's family members were involved in street vender and 21.5% family members of the respondents were farmers.

On the association between current occupation of the participants and the category of respondents, majority of respondents descend to street vendors (66.67% of 'on the street' children, 78% 'of the street' and 83.33% of abandoned). However, a one third of the on the street children were involved in other livelihood activities (i.e. wood work, shoe shining, painter, knitting, and daily labour). The value of Chi-square has clearly showed the existence of a significant relation between current occupation and children category at 10% level of the significance.

Supporting themselves and their families has one of the prevalent reasons for working on the street. In this regard, 53.51% of children work on the street for supporting their siblings, whereas majority of children in the category 'of the street' and abandoned worked for sustaining themselves. It indicates a statistically significant relation between reason of working on the street and children category.

It was also observed that children searches for means of livelihood by themselves or through brokers and their friends. As it is described above, majority of respondents were occupied in street vending. Table 3 shows that except three respondents, the rest (97.37%) of the working children in 'on the street' category had searched for the job by themselves. Likewise, thirty six percent of 'of the street' were engaged through brokers, and just about thirty nine percent of abandoned respondents were reported as through their friends. The Chi-square value indicated the existence of a statistically significant relationship between role of middlemen in searching work and children category at 1% level of the significance.

However, the duration of stay in the street can vary depending on the street category. The evidence of this study indicates that, 76.32% and 78% of 'on the street' and 'of the street' children reported 4-7 years of staying in the street respectively. While, majority of the abandoned children stayed less than four years in the street. The finding from this data indicates that the duration of staying in this city/town as street dweller has a statistically significant relationship with children category at 5% level of the significance.

Similarly, empirical evidences on working experience the respondents suggest that over two third of the working children in 'on the street' category and 78 percent of the "of the street" group had working experience for more than four years on different means of livelihoods. But half of the abandoned street children had the experience of more than four years. Taken together, the result of Chi-square shows that, the presence of statistically significant relationship between working experience and children category.

Out of a total of 114 'on the street' children, 57.02% were working for 5 days per week, while 86% of 'of the street' children work for 7 days in a week. All the children in the abandoned group reported working for 6 days a week. The Chi-square value indicates the existence of a statistically significant relationship between working day per week and children category at 1% level of the significance.

Of the 200 participants who responded to the survey, just about forty seven percent of children working on the street had reported that, they were spending 8 hours or more in their duty per day. But the results indicate that majority of children in the categories 'of the street' and abandoned participants were spending 6-7 hours to earn their means of livelihood. The Pearson Chi-square value indicated in Table 3 clearly showed the existence of a high statistically significant relationship between working time per day and children category.

Table 3: Association between Street Children Category and Means of Livelihood

Variables	Children Category						χ^2
	On the street (n=114)		Of the street (n=50)		Abandoned (n=36)		
	N	%	N	%	N	%	
Current occupation							
Street vender	76	66.67	39	78.00	30	83.33	4.823*
Other	38	33.33	11	22.00	6	16.67	
Reason for working on the street							
To support my sibling	61	53.51	0	0.00	0	0.00	73.582***
To help my mother and father	14	12.28	7	14.00	2	5.56	
To care for myself	39	34.21	43	86.00	34	94.44	
How did you find this work?							
I find work myself	111	97.37	15	30.00	9	25.00	108.252***
Brokers	1	0.88	18	36.00	13	36.11	
Friends tell me about potential work	2	1.75	17	34.00	14	38.89	
Duration in this city/town							
<4 years	23	20.18	6	12.00	16	44.44	51.560***
4-7 years	87	76.32	39	78.00	7	19.44	
>7 years	4	3.51	5	10.00	13	36.11	
Working experience							
4 years and below	34	29.82	11	22.00	18	50.00	7.950**
More than 4 years	80	70.18	39	78.00	18	50.00	
Working day per week							
5 days	65	57.02	0	0.00	0	0.00	207.859***
6 days	48	42.11	7	14.00	36	100.00	
7 days	1	0.88	43	86.00	0	0.00	
Working time per day							
4-5 hours	53	46.49	1	2.00	0	0.00	154.563***
6-7 hours	7	6.14	47	94.00	34	94.44	
8 and more than hours	54	47.37	2	4.00	2	5.56	

Source: Survey Data, 2016-17

Note: ** means p< 0.05; * means p< 0.1 and *** means p< 0.01.

Ordered Probit Regression Result for Determining the Factors of being a Streetism

Ordered Probit Regression examine the impact of family size (FSIZE), age of the respondent (AGE), gender (GEND), current level of education (CEDULEV), previous occupation of the family (FPROCCPN), distance of the school from home (SCHDIS), nature of punishment (PPUNCH) and discrimination (DSCR) on category of the street children. The estimated result on the determinants of street children category is displayed in Table 4. Out of the eight explanatory variables, seven of them were found to be statistically significant in determining

the category of street children in the study area. Interpretation of the estimated significant variables is presented as follows.

Family size of the respondent determines the category of street children significantly. This negative coefficient of FSIZE in Ordered Probit Regression indicates that an increase in family size increase the likelihood that the children are moving from 'of the street' to 'on the street' category. The negative relationship can be explained by the responsibility of children in sustaining themselves and their family members. Even the family members consider it their social responsibility of the children to look into the well-being of the family (Verhoef, 2005). As the size of family increase, per capita income level of family diminishes and thereby children are compelled to earn livelihood in the day times and return back home to assist their family(Ballet et al., 2010; National Commission for Children of Republic of Rwanda, 2012).
Similarly, as expected, age of the participants has a negative relationship with the category of children and the coefficient is significant at five percent level. The result suggests that the children at their infant age belong to the abandoned category. Similar observations are also evident in other studies (Delap,2009;Lalor,1999), where abandoned children are forced to do begging, working as daily laborer and vender on the street.

Gender also determines the categories of children in a significant way. As we are moving from girl to boy category, the probability of being 'on the street' category increases (Lalor,1999).The findings indicate that boys are more likely to belong to the 'on the street' children category than others ('of the street' and abandoned).

Additionally, the current level of education (CEDULEV) also has a positive influence on the category of street children. The analyzed result indicates that the abandoned category of children is now becoming more educated in socially responsible educational system. Along with this, the distance of the school (SCHDIS) from their native home also has a significant impact on children category. Evidently the result of SCHDIS is in accordance with the previous result that abandoned children are less fortunate in accessing school at their early age of life and thereby participate in the educational system in their latter part of the childhood life.
Punishment by the parents in their childhood days often determines the category of street children. The PPUNCH variable is found to be positive and statistically significant at 1% level. The finding suggests that children mistreated by their parents have high probability of distancing themselves from their families, and thereby exposed to the abandoned street life. In other situations, if punishments are given by other persons, then they are likely to return back to their native home (or belongs to 'on the street' category). Furthermore, any sort of discrimination by parents (DSCR) likely result in associating their children with the abandoned street children.

Table 4: Ordered Probit Regression Estimates of Causal Factors of being a Streetism

Dependent Variable (Category of street children) =0 for 'on' the street, =1 for 'of' the street, =2 for 'abandoned' the street

Independent variable	Coefficient	Standard Error	Z
fsize	-.184	.085	-2.16**
age	-.340	.138	-2.46**
gend	-.615	.301	-2.04**
cedulev	.404	.135	2.99***
fproccpn	-4.76	196.61	-0.02
schdis	.227	.085	2.64***
ppunch	4.712	.645	7.30***
dscr	.701	.341	2.05**

Source: Author's calculation

Note: ** means p< 0.05; * means p< 0.1 and *** means p< 0.01.

Binary Probit Regression Estimates of Causal Factors for the Current Occupationof the Respondents

Similarly, theBinary Probit Regression also analyzed the impact of family size (FSIZE), age of the respondent (AGE), gender (GEND), current level of education(CEDULEV), previous occupation of the family members (FPROCCPN), distance of the school from native home(SCHDIS), person punished the children (PPUNCH) and discrimination (DSCR) on thecurrent occupationof the respondent.The estimated result on the determinants of street children category is displayed in table 5. Out of eight explanatory variables, only three of them were found to be statistically significant in determining the current occupation of the respondent of street children in the study area. The result of the analysis of the estimated significant variables is discussed in detail as follows.

As the family size increases, children are searching for some other means of livelihood (painting, daily labourer, wood work, knitting and shoe shining) besides working as street vendor. Estimate on marginal probability suggest that increase in family size by one unit results in higher probability of doing multiple jobs by 5.3%. A sense of social responsibility of the street children in contributing to the well-being of the relatively large family is therefore evident in this study. Similar evidences also observed in other research findings on street children in Africa (Verhoef, 2005; Gebretsadik, 2017**)**

As illustrated in table 5, the coefficient gender (GEND) is statistically significant and influences negatively the current occupation of the respondents. Intuitively, it underlines that boys are doing multiple activities to sustain their livelihood than girl counterparts(Lalor, 1999). In the African context, other similar research works observed that there are diverse livelihood options to a male child, whereas opportunities are limited for the female. Moreover, 'normative gender roles in most African traditional society dictates that the male should take up the mantle as breadwinner, whereas the female be the caretaker' (Ogan, 2021).

Table 5: Binary Probit Regression Estimates of Causal Factors for the Current Occupation of the Respondents

Dependent Variable (Current Occupation) = 1 if only doing street vendor, =0 if others (multiple activity)						
Independent variable	Coefficient	Standard Error	Z	Marginal effect (dF/dX)	Standard Error	Z
fsize	-.182	.063	-2.87***	-.531	.018	-2.87***
age	-0.66	.105	-0.63	-.019	.031	-0.63
gend	-1.48	.309	-4.79***	-.348	.050	-4.79***
cedulev	.071	.104	0.69	.020	.030	0.69
fproccpn	.365	.323	1.13	.102	.085	1.13
schdis	-.042	.061	-0.70	-.012	.018	-0.70
ppunch	.890	.298	2.99***	.246	.076	2.99***
dscr	.041	.262	0.16	.012	.076	0.16
cons	2.56	1.07	2.40**			

Source: Author's calculation

Note: ** means p< 0.05; * means p< 0.1 and *** means p< 0.01.

Punishment by their parents is expected to engaging themselves into multiple activities to sustain their own livelihood as they do not want to return back to their original home. However, empirical results suggest that the children punished by their parents are working as only street vendors, which is contradictory to our hypothesis.

4. Conclusions and Policy Implications:

In Ethiopia, street children face complex and interwoven socio-economic problems and thereby became the most vulnerable groups of the population.This study attempts to identify the socio-economic factors determining the likelihood of children becoming a member of street children's group in the study area. In addition, the study identifies some of the important factors in determining their likelihood of occupational choice. Empirical results suggest that all motivation factors (except age of the respondents) of becoming a part of streetism are statistically associated with category of street children. In addition, category of street children is correlated with means of livelihood. Even though a majority of street children were involved in street vendor activity across children category, but a one third of the 'on the street children' were involved in other livelihood activities (i.e. wood work, shoe shining, painter, knitting, and daily labour).

In this paper, we employed qualitative response model to identify the determinants of a category of street children and their occupational choice. Our empirical results of Ordered Probit model indicates that size of the family, age, gender, current educational level, distance of the school, nature of punishment, and discrimination determines the category of the street children. On the other hand, size of the family, gender and punishment has an impact on determining the current occupation of the respondents. Thereby, this paper identifies size of the family, gender and punishment as the common socio-economic factors, which determine the category of street children and their occupational choice.

A comprehensive rehabilitation programme need to be drafted with the involvement of street children, their families, representatives of the societies, academicians, experts from concerning government and social intervention institutions. Those who are below 14 years may be provided incentives to return to their original home with the active involvement of

intermediaries like Community Based Service Providers (CBSP)[2]. Otherwise, support them in social intervention centre. On the other hand, children above 14 years held at the centre may be trained with different skill (technical or vocational) based activities so as to enhance their livelihood opportunities. Different training programme can be devised on skill based small agribusiness and non- agribusiness fields (like: food supply, baby-sitting, dress making, beauty parlour, event organizer, poultry, dairy, garment business and seasonal business) and support financially to begin their own ventures.

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[2] Participation of selected family members of street children as Community Based Service Providers (CBSP) and selected street children also as Street Children Based Service Provider (SCHBSP) can be an innovative way in arousing awareness of the life world of streetism.

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