

University of Khartoum
Faculty of Economic and Social Studies
Department Of Econometrics and Social statistics

Factors Affecting Homelessness Among Street Children In Khartoum State

**A Thesis Submitted for the Partial Fulfillment of the
Requirement of the Degree of Master of Science in
Econometrics and Social statistics**

By

Wisal Ali El Tahir Hassan

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Dedication

- To all homeless children in Sudan.
- To my wonderful family who are a constant source of encouragement and support.
- To my friends and colleagues in National population Council.

Abstract

This study aims to find out the main factors of homelessness and examine the risk behavior among street children in rehabilitations centers in Khartoum State (Alrashad, Tayba and Aml).

The data of the study collected through direct interviews using semi-structured questionnaire with street children currently are residing at Rehabilitation Centers in Khartoum State and it covered 300 males of street children. Questionnaire contained two sections one contained socio-demographic data of respondents and the other Section contained data of main causes of homelessness. The analytical part used Factor analysis Technique using SPSS software.

The conclusion is that the main factors of children homelessness are attraction of city life, natural and political factors, family disruption, parent abuse and economic factors.

The study recommended that, real solution to the problem in intervening at home to prevent children from coming to the streets, locating preventive programs in areas where most street children's families live at present is a key to prevent new children from coming on to the streets, convincing children with rehabilitation centers is the best alternative of family and reform and improve legislations and laws for child protection.

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Chapter one Introduction

1.1: Background:

Homelessness is a situation in which a person does not have a long term constant place of ongoing residence. This is distinguished from nomadic cultures in which that condition is considered normal. The 'problem' of homelessness is most visible in the poor sections of large cities and suburbs, though the homeless frequently co-exist less visibly within communities where most residents are not poor. There are many possible causes of homelessness. World wide causes of homelessness may include mental illness, unemployment, and drug and alcohol addiction in addition to natural and manmade disasters. Social changes and poverty could lead to increased homelessness.

Homelessness among children is one of the major problems in many countries. The general definition of homeless or street child is a child who lives on the street – in particular, one that is not taken care of by parents or other adults – and who sleeps on the street because he or she does not have a home. Street children exist in many major cities, especially in the developing countries, and may be subject of abuse, neglect and exploitation.

The reasons by which children abandon their homes are varying but can be summarized in a series of push and pull factors. The first include extreme poverty, severe family conflict, abuse and neglect, or parental abuse of alcohol and drugs. The pull factors include a perceived freedom in the streets. In short, the child feels he has a better opportunity in the streets than in home. In Latin America, a common cause is abandonment by poor families unable to feed all their children. In Africa, an increasingly common cause is AIDS.

Definition (1.1):

A child means every human being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier. (Child Rights Convention definition).

Sudanese definition:

In Sudan child homelessness is becoming an increasing phenomena due to many factors that include civil war, drought and poverty. It is difficult to estimate accurately numbers of street children because of their high mobility and lack of central registration or meeting point; The recent data estimated the number of street children in Khartoum state about 34,000 in 2001.¹

According to the Temporal Decree of Public Control Law of Khartoum State 1996, a street child is defined more concisely as:

"A person who has no apparent resident place or apparent work for gaining". Social definitions are slightly different, and recognize the distinction between street children on the street (who return home at night) and children of the streets (who struggle alone without family support). They are often referred to as 'abandoned' children..

There are two types of street children in Khartoum. Working street children are those who spend most of their days working on the streets, but usually sleep at home, while full-time street children are those who generally spend both their day and night on the streets. The study used the Sudanese definition.

1.2: Problem Statement

- Is homelessness among children a serious problem that may have many negative impacts on the homeless child and the community in general?
- Do street children leave their homes due to lack of family environment, care, and supervision ,economic reasons, attraction of city life and natural and environmental problems
- Do Street children get involved in many risky behaviors like alcohol and drugs abuse, unsafe sexual relations, crime and HIV/AIDS?
- Do all these behaviors affect the health and development of street children and may create hatred to other members of the community, and then expressed in violence and crime?
- Does homelessness deprive children from education and lead to loss of human wealth in the community?

¹ UNICEF – 2001 – Children of the Sug, Khartoum – Sudan

1.3: Justifications:

The seriousness of this problem and its effect on both individuals and community makes it very important to try to find out its causes and suggest possible solutions. Knowing the real causes of homelessness will help us to develop recommendations to address them and prevent future increase in the number of street children.

1.4: Objectives:

The main objectives of this study are to:

1. Examine the main causes of homelessness among street children in Khartoum State.
2. Examine the risk behavior among street children.
3. Come out with some policy recommendations.

1.5: Hypotheses:

The main causes of homelessness can be as follows:

1. Socio-economic factors as: economic, political and environmental, family dysfunction, death and separation from parents and attraction of street life.
2. Street children are subject to risk behavior as (drinking alcohol, drugs and sexual relation).

1.6: Research Methodology:

1.6.1: General Approach.

The study focuses on exploring the causes of homelessness through direct interviews using semi-structured questionnaire with street children currently residing at Rehabilitation Centers in Khartoum State.

1.6.2: Targeted Population:

The study targeted male street children from 6 to <18 years old currently residing at Rehabilitation Centers in Khartoum, the targeted centers were Aml, Alrashad and Tayba.

The study excluded female street children due to lack of girl's rehabilitation centers so there is only one rehabilitation center in Omdurman (ALBASHIR) and the majority of girls are over 18 years old.

1.6.3: Sample Size:

Factor analysis depends mainly on correlation coefficient between variables which fluctuate from sample to sample. Much has been written about the necessary sample size for factor analysis resulting in many rules of thumb. The common rule is to suggest that a researcher has at least 10 to 15 subjects per variable. Although Nunnally, 1978 did recommended having 10 times as many subject as variables. Kass and Tinsely 1979 recommended having between 5 and 10 subjects per variable up to a total of 300 ,beyond which test parameters tend to be stable regardless of the subject to variable ratio². According to the above this study take sample size = 300.

1.6.4: Tools of data collection:

The study used individual questionnaire for face to face interviews. Questionnaire was standardized to insure consistency of data collection. Questionnaire contained 2 sections:

a). Section one:

This section contained socio-demographic data of respondents.

b) Section two:

It contained questions on main causes of homelessness, history, duration and future expectations of respondents.

Informed consent was asked before each interview.

1.6.5: Data analysis plan:

After collection of individual data through interviews, questionnaires were checked for completeness. After that data was entered and analyzed, this study utilized descriptive and analytical analysis, the descriptive used percentage and cross-tabulation. The analytical part used factor analysis Technique using SPSS software.

1.7: Study Organization:

This study contained five chapters:

- Chapter one is an introductory chapter.
- Chapter two reviews the literature of relevance to the topic.
- Chapter three shows the Factor Analysis Techniques.
- Chapter four presents the results.
- Chapter five reveals the conclusion and recommendations.

² Andy Field, Discovering statistics Using SPSS for Windows, sage publications (2003), London, Thousand oaks

Chapter Two Literatures Review

2.1 Introduction

People are generally considered to be homeless if they are out of home. This means that homelessness may include those people:

Who are sleeping rough, staying in emergency hostels of refugees, staying in bed and breakfast because they are homeless, staying temporarily with friends because they have nowhere else to go and staying in squats ³

Definition 2.1:

The legal definition of homelessness comes from USA housing Act 1988. In essence this says that a person or family is homeless if in opinion of the local authority:

- They have no accommodation they can reasonably occupy or remain in occupation of.
- Or they are living in temporary accommodation of some kind because they have nowhere else to go
- Or they can not afford to get their own accommodation.

Definition (2.2):

In the 1980 decennial census, the US Census Bureau identified people who lived by themselves and did not have “a usual home elsewhere” (i.e., with family) as “homeless”. This way of thinking about homelessness reflects cultural expectation that the “normal” way to live is in family, and that something is wrong when people live by themselves. Home in this usage implies people, not physical shelter.

Writers struggle with the concept of homelessness also recognized that individuals and families may become homeless “in place”, so to speak, fire, flood, or nature disaster could render people homeless by destroying

³ Chamberlain and Mackenzie, 1992, Australian Bureau of Statistics.

their dwelling. Or circumstances could change the ability of families and communities to accommodate certain of their members, causing them to eject the most burden some. Or people's own behaviors may make it difficult for family and community to support them in housing. In the United States, official government definitions of homelessness focus exclusively on this "houseless" aspect.⁴

2.2: Causes of homelessness:

There is rarely a simple explanation for a person's homelessness. Homelessness usually is a consequence of a combination of both structural and individual factors. In the past explanations of homelessness tended to concentrate on its being an individual's problem due to personal difficulties.

Now there is a much wider recognition of how societal factors such as social policy and social exclusion along with structural issues such as "poverty, unemployment and housing shortage" contribute to homelessness that both individual and structural factors are taken into account in order to come up with an appropriate and concentrated response that meets the needs of the individuals whilst addressing long-term causative factors⁵

2.3: Street Children:

Street kids are children who live on the street-in particular, those whom are not taken care of by parents or other adults- and who sleep on the street because they do not have a home.⁶

The usual image is of young homeless people who leave and work on the streets but it is better to think of street children in terms of their relationship to the street. Some come from street families others live mainly on the streets but may go back to the family home in the evening or make sporadic visits and other sleep in night shelters. A proportion endures periods in jail or institutions or spends their days working.⁷

⁴ National Survey of Homelessness Assistance Providers and Clients (NSHAPC) – 1999 – Homelessness USA.

⁵ Chamberlain and Mackenzie, 1992, Australian Bureau of Statistics

⁶ Wikipedia – 2003 - The free Encyclopedia.

⁷ New Internationalist 377 – April 2005 – Street Children the Facts.

2.3.1: Street Children in Sudan:

According to Sudanese Juvenile Law (1983), a vagrant is boy or girl under 18 years who is vulnerable to delinquency, homeless or unable to show himself/herself. They are considered vagrants if they spend the night on the street, abandon their parents, guardians, engage in begging, prostitution or immorality, or if they associate with suspected criminals.⁸

2.4: Magnitude of Street Children Problem:

Nobody knows for sure of magnitude of street children worldwide, but estimates differ widely-anywhere from 30 to 170 million⁹.

Their mobility and the fact that they move in and out of street living make them difficult to count. They are not included in surveys and censuses. There are no global statistics and the most reliable national ones come from agencies on the ground.

Particular circumstances such as warfare, deteriorating economics and natural disasters can increase their numbers. Thus, prior to the 1991 Gulf War there were no reported street children in Iraq; with the ongoing conflict, UNICEF is alarmed by the growing numbers of orphans on the streets.

2.4.1: Magnitude of the problem in Asia:

There are 150 million children work in Asia Pacific area – 104 million of them in hazardous forms of child labor. Asia has traditionally had high number of children on the streets.¹⁰

2.4.2: Magnitude of the problem in Africa:

Deeping's poverty and devastation caused by AIDS in many African countries has led to disintegration of the traditional social supports, pushing children on to the streets.

⁸ Information about street children – Sudan Civil Society Forum for North and Middle East on Promoting and Protecting the Rights of Street Children, 3 – 6 March 2004, Cairo, Egypt

⁹ Information about street children – Sudan Civil Society Forum for North and Middle East on Promoting and Protecting the Rights of Street Children, 3 – 6 March 2004, Cairo, Egypt

¹⁰ UNICEF – 2005 – Street Children the prevalence, abuse, and exploitation of street children

- In Egypt the average age of street children is 13 years. 42,505 children were arrested in 2001; 10,958 were charged with being vulnerable to delinquency.
- In Benin, an estimated 50,000 are trafficked to near by countries where they often end up selling goods on streets.
- In Democratic Republic of Congo, NGOs estimate range from 12,000 to 25,000 the Ministry of Social Affairs say the number is closer to 40,000.
- In Ethiopia, the war-torn 1980s and 1990s caused large increases in the numbers of street children estimates around 150,000
- In Kenya, 250,000 estimated. (Half of the general population of the country is under 18).
- In South Africa, 250,000 nationwide¹¹.

2.4.3: Magnitude of Street Children in Sudan:

Table (2.1):

Magnitude of street children per states in Sudan

State	Number of children	Percentage %
Khartoum state	14336	38.8
Central states	12512	33.9
Darfur states	5698	15.4
Kordofan states	2825	7.7
Eastern states	1485	4
Northern states	75	.2
Total	36931	100

Source: Homeless Children in Sudan States - Social and Health Survey – 1991

Sudan poverty rates as high as 90% among the general population, there are 70,000 street children in Northern Sudan; 86% of them boys. The vast majority are employed.¹²

¹¹ New Internationalist 377 – April 2005 – Street Children the Facts

¹² New Internationalist 377 – April 2005 – Street Children the Facts.

2.4.4: Magnitude of Street Children Problem in Khartoum:

It is difficult to accurately estimate exact numbers of children on the streets because of their high mobility and lack of central registration on meeting point. It is also difficult to compare data over the years because of differences in methods (most of which are not clearly explained in available documentation) and definitions of street children.

In 1960, 399 minors under the age of 20 were arrested in all of Sudan, and 287 were identified as vagrants, that it roaming the streets without shelter. In 1974, different census estimated there to be no more than 1.000 vagrant minors in Sudan.

The findings in 1980 and 1985 point to the ongoing difficulties of estimating the numbers of children on the streets are Contradictory.

In 1980 25.000 minors in were estimated in Khartoum alone and yet between 1984 and 1985 it was estimated that there were 12.000 unaccompanied minors in Khartoum. In 1988 it was estimated that there were 16.700 street boys in Khartoum. In 1990 a study estimated that there were 34.000 unaccompanied children on the street in Khartoum.¹³

2.5: Causes of Children Homelessness:

2.5.1: Worldwide:

Street living children may leave their homes due to lost of their families through war or illness, or have been abandoned because they had became too much of a burden, or else ran away from their abusive, dysfunctional, poverty-stricken families and now live alone on the streets.¹⁴

2.5.2: In Sudan:

There are many factors pushing children to the streets like economic reasons as looking for work, inability to pay school fees, insufficient food at home, family homelessness.

¹³ UNICEF – 2001 – Children of the Sug, Khartoum – Sudan.

¹⁴ UNICEF – 2005 – Street Children the prevalence, abuse, and exploitation of street children.

There are political and environmental reasons as war, conflicts and drought. Family dysfunction reasons as disagreements with family members, physical and sexual abuse at home and separation from parents through death/divorce. Some children also suggested that they had been bored of staying at home and that friends had told them of the more exciting life in the cities.¹⁵

2.5.3: In Khartoum state:

There are negative factors pushes Children to the streets such as poverty or abuse at home. However children may continue to stay on the streets (despite the hardships experienced) because of positive "pull" factors such as friendships they develop with other children or the freedom that they experience.

Push factors for fulltime street boys:

- Most full-time street boys ended up to the streets because their families were extremely poor, and thus could not afford to feed them or pay school fees.
- 83% of full-time street boys said they left home because they were looking for work, since extra earnings would make a difference in household income.
- Some boys told that they have traveled a long distance to reach Khartoum specifically with hope of finding work.

They ended up living on the streets because they could not find work and had no place to go.

Political or environmental reasons and the ongoing civil war between the south and north has been feature of Sudan's political landscape for the past 20 years as a result, every high number of people living in conflict zones have been displaced, and many of them have been forced to relocate in Khartoum.

In western Sudan, desertification and subsequent drought have also forced many families to move to areas such as Khartoum which has greater food security.

¹⁵ Information about street children – Sudan Civil Society Forum for North and Middle East on Promoting and Protecting the Rights of Street Children, 3 – 6 March 2004, Cairo, Egypt.

- The treatment in the family and physical abuse at home emerged as significant factors pushing children to the streets.

Often the push factors appear to be a combination of child's family having poor income or because of displacement due to war or drought and a significant level of family dysfunction as well.

Dysfunction often manifested in high levels of conflict and physical abuse within the family.

- 17% of full-time street boys said that their mothers had died, and 22% said that both their father had died, while 4% said that both their parents had died.

The relationship between one or both parents dying and a child comes to the streets needs to be explored further.

Many children who lose a parent are left in the care of the other parent, or in the case of both parents dying, with closer relative. However, the absence of the level of attention normally displaced by one or both birth parents, and/or the presence of ill treatment by stepparent may make a child feel unloved and contribute to their leaving home.

- In Khartoum, police and public security regularly hold public order security campaigns by arresting all people who do not have specific purpose in particular location.

These campaigns are often used to rid the streets of children and adults who are homeless.

- Some of street boys came to the streets looking for their parents. They came to the streets for one purpose and they stayed there permanently because they had no other options and/or started to normalize and accept the life of the streets.

Pull Factors for Full-time street boys:

In Khartoum State:

As stated earlier, children primarily start to leave home because of factors that are pushing them to the streets. However, the final decision to leave home is often made because something about the streets and market (Sug) pull them onto the streets.

Some factors that pull children to the streets:

- 48% of full-time street boys said that they bored of staying at home, presumably because they did not have much else to do, while 43% said they had heard of good things in the streets.
- 41% of full-time street boys said that one of the reasons they left home was because their friends convinced them to go to the streets.
- For some full-time street boys, the transition to living on the streets is affected by how quickly they are introduced to silision (bicycle tire repair glue) sniffing.
- A number of children say that they choose to live on the streets because they were first introduced to glue sniffing when tentatively trying out the life of the street and then desired continual access to it.
- Some full-time street children leave home because they feel restricted by their parents or guardians, and they desire freedom from the rules and regulations of household.¹⁶
- (These figures were taken from Children of the Sug study which was conduct in Khartoum state in 2001 to understand the lives of street life in Khartoum in order to assist the government and national and international non governmental organizations in designing interventions to assist street children).

Causes of Girl's homelessness in Khartoum State:

The data and information gathered on the phenomenon of vagrancy among girls in Khartoum state is taken in broader context of poverty, displacement by war and drought and other unavoidable factors.

Family disruption caused by factors such as death of one or both parents, divorce and other socio-economic or political intervening factors are among these.

¹⁶ UNICEF – 2001 – Children of the Sug, Khartoum – Sudan.

Situation of homelessness girls in Khartoum state:

Girls are found in the streets of Khartoum, either wondering in the markets or begging and carrying very young infants while many participate in vagrancy activities such as sniffing and prostitution. At best many of them indulge in some income generating activities such as cleaning utensils for women selling food or tea or carrying some items for sale such as sweets, spices and groundnuts.¹⁷

¹⁷ RAPID operational Care and Scientific Services Survey – 2001 – Street girls in Khartoum State.

Chapter three

Factor Analysis Technique

3.1 Factor Analysis

Factor analysis is widely used to analyse data, and no doubt, will continue to be widely used in future, the reason for this is that the technique does seem to be useful for gaining insight into structure of multivariate data.¹⁸

The essential purpose of factor analysis is to describe, if possible the covariance relationship among many variables in terms of a few underlying, but unobservable random quantities called factors (or latent variables). Variables can be grouped according to their correlations, that is, all variables within a particular group are highly correlated among themselves but have relative small correlation with variable in different groups. It is conceivable that each group of variables has a single underlying construct, or factor that is responsible for observed correlation. Factor analysis can be considered as an extension of principal components analysis both can be viewed as an attempt to approximate the covariance matrix (Σ). However the approximation based on factor analysis model is more elaborate.

3.2 Data Requirements:

Factor analysis is conducted on the correlations or covariance's between items. The variables should be quantitative at the interval or ratio level. Categorical data (such as religion or country of origin) are not suitable for factor analysis. Data for which Pearson correlation coefficients can sensibly be calculated should be suitable for factor analysis.

3.3 Assumptions

The data should have a **bivariate normal distribution** for each pair of variables, and observations should be independent. The factor analysis model specifies that variables are determined by common factors (the factors estimated by the model) and unique factors (which do not overlap between observed variables); the computed estimates are based on the assumption that all unique factors are uncorrelated with each other and with the common factors.¹⁹

3.4 The Orthogonal Factor Model

The observed random vector X with P components, has mean μ and covariance matrix Σ , the factors model postulates that X is linearly

¹⁸ Bryan F.J. Manly, Multivariate Statistical Methods A primer. London. New York. Chapman and Hall.

¹⁹ SPSS 11 manual

dependent upon a few unobservable random variable $F_1, F_2 \dots F_m$ called common factors and P additional sources of variation $\epsilon_1, \epsilon_2 \dots \epsilon_p$ called errors in particular the factor analysis model

$$X_1 - \mu_1 = l_{11} F_1 + l_{12} F_2 + \dots + l_{1m} F_m + \epsilon_1 \quad (3.1)$$

$$X_2 - \mu_2 = l_{21} F_1 + l_{22} F_2 + \dots + l_{2m} F_m + \epsilon_2$$

⋮
⋮
⋮

$$X_p - \mu_p = l_{p1} F_1 + l_{p2} F_2 + \dots + l_{pm} F_m + \epsilon_p$$

Or on matrix form that can be written as follows:-

$$\underset{(P \times 1)}{X - \mu} = \underset{(p \times m)}{L} \underset{(m \times 1)}{F} + \underset{(p \times 1)}{\epsilon} \quad (3.2)$$

μ_i = mean of variable i

ϵ_i = i th specific error

F_j = j th common factor

L_{ij} = loading factor of the i th variables on j th factor

P = number of variables

m = number of factors

If $m = p$ there is no factor analysis because we can't get the inverse of the matrix L

Because factor analysis used to reduce the data, if the number of factor is equal to the number of variable then there is no need to use Factor analysis.

The coefficient L_{ij} called the loading of the i th variable on the j th factor, so the matrix L is the matrix of factor loadings. The i th specific factor ϵ_i associated with the i th response X_i . The p deviation

$X_1 - \mu_1, X_2 - \mu_2, \dots, X_p - \mu_p$ are expressed in term of $p+m$ random variable, $F_1, F_2, \dots, F_m, \epsilon_1, \epsilon_2 \dots \epsilon_p$ which are unobservable. This

distinguishes the above model from the multivariate regression model in which the dependant variable can be observed.

With some additional assumptions about random vectors F and ε , the above model implies certain covariance relationships:

The unobservable random vectors F and ε satisfy the following properties: - F and ε are independent

$$E(F) = \mathbf{0} \quad (3.3)$$

$$\text{Cov}(F) = E(FF') = \mathbf{I} \quad (3.4)$$

(m*m)

$$E(\varepsilon) = \mathbf{0} \quad (3.5)$$

$$\text{Cov}(\varepsilon) = E(\varepsilon \varepsilon') = \Psi \quad (3.6)$$

(p*p)

Where Ψ is diagonal matrix

$$\begin{bmatrix} \Psi_1 & 0 & \dots & 0 \\ 0 & \Psi_2 & \dots & 0 \\ \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot \\ 0 & 0 & \dots & \Psi_p \end{bmatrix}$$

The orthogonal factor model implies a covariance structure for X , from the model (3.2) we have:

$$\underset{(p*1)}{X - \mu} = \underset{(p*m)}{L} \underset{(m*1)}{F} + \underset{(p*1)}{\varepsilon}$$

$$\begin{aligned} (X - \mu)(X - \mu)' &= (LF + \varepsilon)(LF + \varepsilon)' \\ &= (LF + \varepsilon)((LF)' + \varepsilon') \\ &= LF(LF)' + \varepsilon(LF)' + LF\varepsilon' + \varepsilon\varepsilon' \\ \Sigma &= \text{cov}(X) = E(X - \mu)(X - \mu)' \\ &= LE(F F')L' + E(\varepsilon F')L' + L E(F \varepsilon') + E(\varepsilon \varepsilon') \end{aligned}$$

Since

$$E(\mathbf{F}\mathbf{F}') = \mathbf{I} \text{ and } \mathbf{F} \text{ \& } \boldsymbol{\varepsilon} \text{ are independent So } E(\boldsymbol{\varepsilon}\mathbf{F}') = \mathbf{0} \quad (3.7)$$

Therefore

$$\boldsymbol{\Sigma} = \mathbf{L}\mathbf{L}' + \boldsymbol{\Psi} \quad (3.8)$$

Or

$$\text{Var}(\mathbf{X}_i) = l_{i1}^2 + l_{i2}^2 + \dots + l_{im}^2 + \psi_i \quad (3.9)$$

$$\text{cov}(\mathbf{X}_i, \mathbf{X}_k) = l_{i1}l_{k1} + l_{i2}l_{k2} + \dots + l_{im}l_{km} \quad (3.10)$$

Also from the same model(2), we have:

$$\underset{(p*1)}{\mathbf{X}} - \underset{(p*1)}{\boldsymbol{\mu}} = \underset{(p*m)}{\mathbf{L}} \underset{(m*1)}{\mathbf{F}} + \underset{(p*1)}{\boldsymbol{\varepsilon}}$$

$$\begin{aligned} (\mathbf{X} - \boldsymbol{\mu})\mathbf{F}' &= (\mathbf{L}\mathbf{F} + \boldsymbol{\varepsilon})\mathbf{F}' \\ &= \mathbf{L}\mathbf{F}\mathbf{F}' + \boldsymbol{\varepsilon}\mathbf{F}' \end{aligned}$$

So

$$\text{cov}(\mathbf{X}, \mathbf{F}) = \mathbf{L}E(\mathbf{F}\mathbf{F}') + E(\boldsymbol{\varepsilon}\mathbf{F}') = \mathbf{L} \quad (3.11)$$

$$\text{cov}(\mathbf{X}_i, \mathbf{F}_j) = l_{ij} \quad (3.12)$$

3.5 Communality

That portion of variance of the i^{th} variable contributed by the m common factors is called the i^{th} communality. It is important to understanding some basic thing about the variance within an \mathbf{R} matrix, the total variance for particular variable will have two components some of it will be shared with other variables or measure (common variance) and some of it will be specific to that measure (unique variance). We tend to use unique to refer to a variable that can be reliably attribute to only one measure, however there is also variance that is specific to one measure but not reliably to one measure so this variance is called error or random variance, the proportion of common variance present in a variable is known as the communality. As such, a variable that has no specific variance (or random variance) would have communality of one; a variable that shares none of its variance with

any other variable would have a communality of zero. In factor analysis we are interested in finding common underlying dimensions within the data and so we are primarily interested only in the common variance. Therefore, when we run factor analysis it is fundamental that we know how much of the variance present in our data is common variance. This presents us with a logical problem, to do the factor analysis we need to know the proportion of common variance present, yet the only way to find out the extent of the common variance is by carrying out a factor analysis, there are two ways to solve this problem:

First Approach: -

We assume that the communality of every variable is equal one by making this assumption we merely transpose our original data into constituent linear components known as principal component analysis

Second Approach: -

In the second approach is to estimate the amount of common variance by estimating the communality value for each variable. There are various methods of estimating communalities but the most widely used (including SPSS) is to use the Squared Multiple Correlation (SMC) of each variable with all other variables, in this case we use multiple regression using one measure (variable) as outcome (dependent variable) and the other variables as predictors (independent variables), the resulting multiple R^2 would be used as an estimate of the communality of the dependent variable, we should note that R is correlation between the observed value of the dependent variable and predicted values of the independent variables estimated by multiple regression model, mention that large value of the multiple R represent a large correlation between predicted and observed value of the dependent variable. A multiple R of one represents a situation in which the model perfectly predicted the observed data. This second approach is what is done in factor analysis. These estimates allow the factor analysis to be done. Once the underlying factors have been extracted, new communalities can be calculated that represent the multiple correlation between each variable and the factor extracted. Therefore, the communalities measure the proportion of variance explained by the extracted factors.

From the above we can rewrite equation (3.10) as follows

$$\text{var}(X_{ii}) = \text{communalities} + \text{specific variance}$$

Or

$$h^2_{ii} = l^2_{i1} + l^2_{i2} + \dots + l^2_{im}$$

And

$$\sigma_{ii} = h^2_{ii} + \psi_i \quad \text{where } i = 1, 2, \dots, p \quad (3.14)^{20}$$

3.6 Methods of estimation

We shall consider two of the most popular methods of parameter estimation. The principal component (and the related principal factor) method and the maximum likelihood method. The solution from either method can be rotated in order to simplify the interpretation of factor.

3.7 The principal components (and principal factor) method

The principal components factor analysis of the sample covariance matrix S is specified in term of its eigenvalue-eigenvector pairs (λ_1, \hat{e}_1) , (λ_2, \hat{e}_2) , $(\lambda_3, \hat{e}_3) \dots (\lambda_p, \hat{e}_p)$

where $\lambda_1 \geq \lambda_2 \geq \dots \geq \lambda_p$. let the number of common factors be m which is less the number of variable (p) the matrix of estimated factors loading (l_{ij}) is given by

$$L = \{(\sqrt{\lambda_1}) \hat{e}_1 \quad (\sqrt{\lambda_2}) \hat{e}_2 \quad \dots \quad (\sqrt{\lambda_m}) \hat{e}_m\}$$

The estimated specific variances are provided by the diagonal elements of the matrix

$$S - L L'$$

So

$$\Psi = \begin{bmatrix} \psi_1 & 0 & \dots & 0 \\ 0 & \psi_2 & \dots & 0 \\ \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & \dots & \psi_p \end{bmatrix} \quad \text{with } \psi_i = S_{ii} - \sum l_{ij}^2 \quad i=1, 2, \dots, m$$

²⁰ Andy Field, Discovering statistics Using SPSS for Windows, sage publications (2003), London, Thousand oaks

Communality are estimated as

$$h^2_i = l^2_{i1} + l^2_{i2} + \dots + l^2_{im}$$

Noted that the principal component factor analysis of the sample correlation matrix is obtained by stating with R in place of S.

We should note that the principal component factor analysis is appropriate for first pass through the data and it is not required that R or S be non-singular.²¹

3.8 The maximum likelihood Method

If the common factor F and specific ε can be assumed to be normally distributed, then the maximum likelihood estimates of the factor loadings and specific variance may be obtained.

Where Q is loading of the i th variables on j th factor

$$\begin{aligned} \ell(\mathcal{X}; \mu, \Sigma) &= -\frac{n}{2} \log |2\pi\Sigma| - \frac{1}{2} \sum_{i=1}^n (x_i - \mu)\Sigma^{-1}(x_i - \mu)^\top \\ &= -\frac{n}{2} \log |2\pi\Sigma| - \frac{n}{2} \text{tr}(\Sigma^{-1}\mathcal{S}) - \frac{n}{2}(\bar{x} - \mu)\Sigma^{-1}(\bar{x} - \mu)^\top. \end{aligned}$$

This can be rewritten as

$$\ell(\mathcal{X}; \hat{\mu}, \Sigma) = -\frac{n}{2} \{ \log |2\pi\Sigma| + \text{tr}(\Sigma^{-1}\mathcal{S}) \}.$$

Replacing μ by $\hat{\mu} = \bar{x}$ and substituting $\Sigma = QQ^\top + \Psi$ this becomes

$$\ell(\mathcal{X}; \hat{\mu}, Q, \Psi) = -\frac{n}{2} [\log \{ |2\pi(QQ^\top + \Psi)| \} + \text{tr} \{ (QQ^\top + \Psi)^{-1}\mathcal{S} \}].$$

3.9 Kaiser- Meyer-Olkin (KMO) Measure of sampling Adequacy

The (KMO) statistic can be calculated for individual and multiple variables and represent the ratio of square correlation between variables and the square partial correlation between variables, the (KMO) varies between 0 and 1, a value of 0 indicate that the sum partial correlation is large relative to the sum of correlation indicating that the factor analysis is likely to be inappropriate. A value close to 1 indicates the patterns of correlation are relatively compact and so factor analysis should yield distinct and reliable factors. Kaiser (1974) recommends accepting value greater than .5 as acceptable value, value below this value should to either to collect more data or rethink which variables to include.

²¹ K.V.M ardia, J.T.Kent and J.M.Bibby, multivariate analysis, third printing 1982 London or Landsan Diego New York

3.10 Anti-image correlation Matrix

The diagonal of the anti-image correlation represents the (KMO) for individual variables, as well as checking the over all (KMO) statistic it is important to examine the diagonal elements of the anti-image correlation matrix, the value of should be above .5 for all variables, variables with value below .5 should exclude from the analysis. The off-diagonal elements of the anti-image correlation represent the partial correlation between variable.

3.11 Bartlett's Test of Sphericity

Bartlett's test the null hypothesis that the original correlation matrix is an identity matrix. Factor analysis needs some relationships among variables and if the R-Matrix was an identity matrix then all correlation coefficients would be zero therefore to do factor analysis this test should be significant value less than .05. A significant test tell us that the R-matrix is not an identity matrix therefore there are some relationships among the variables.

3.12 Kaiser Criterion

In factor analysis not all factors are retained in an analysis, Kaiser recommended retaining all factors with eigenvalues greater than one, this criterion is based on the idea that the eigenvalue represent the amount of variation explained by a factor and that an eigenvalue of one represent substantial amount of variation, this criterion is accurate when the average communalities is grater than .6 and the sample not less than 250.

3.13 Factor rotation

Generally in factor analysis most variables have high loadings in the most important factor, and small loading in all other factors. This characteristic makes interpretation very difficult, and so a technique called factor rotation is used to discriminate between factors.

There are two types of rotation that can be done, the first is orthogonal rotation it means that the factor analysis rotated factors while keeping them independent, before rotation, all factors are independent and the orthogonal rotation ensures that the factors remain uncorrelated. The other form of rotation is oblique rotation, the differences with oblique rotation is that factors are allowed to correlate. One approach used in factor analysis is to run the analysis using both types of rotation. Pedhazur and Schemlkin (1991) suggest that if the oblique rotation demonstrates a negligible correlation between the extracted factors then it is reasonable to use the orthogonally rotated solution, if the oblique rotation reveals a correlated

factor structure, then the orthogonally rotated solution should be discarded. In any case, the oblique rotation should be used only if there are good reasons to suppose that the underlying factor could be related in theoretical term.²²

²² Andy Field, *Discovering statistics Using SPSS for Windows*, sage publications (2003), London, Thousand oaks

Chapter Four Data Analysis

4.1 Personal Data:-

The sample size of the data is 300 of homeless boys aged (6-18 years), whom are resident at rehabilitations centers (Alrashad, Tayba and Aml)

The location of Alrashad center for homeless children is in Khartoum, south of the international African University and Tayba center in Khartoum, Jabl Awlyaa Locality.

The centers objectives are: to accommodate homeless children at the age (6-<18) years old, try to find the families of these children, provide the children with food, clothes and health care, grow the children up upon ethics values and the traditions and education and technical training for children.

The children should be at the age (6-<18), free from mental diseases, not accused on any crime and admission should be through the Khartoum (police department of social safety).

The centers provide educational, recreational, religious and cultural programs to children.

The centers financed by government and non governmental organizations (NGOs) and the capacity of centers are between 400 to 600 child.

Aml is non governmental society, it established in 1984 concerned with children deprived of family attention and care.

It developed its work in the fields of protection, advocacy and awareness of children's rights.

The society in collaboration with Hope and Homes international organization developed a model project for alternative family, the project consist of 8 houses for homeless children, each house contain 10 children with alternative father and mother, the family should be from the same religious and ethnic group of children.

The admission of children should be through State Ministry of Social Affairs according to agreement with government.

The society financed by it own resources and donors.

Constraints and difficulties:

Although researchers in this subject may receive help from different individuals and societies, the limitation of budget remain the first constraint face the researcher.

Other constraints are: permission from State Ministry of Social Affairs for field work takes times and confidence building with children to give accurate data.

The questionnaire contained two sections one was a personal data section and the other was a factor analysis data section.

The frequency and percentage of each center boys are recorded in table (4.1)

Table (4.1) distribution of respondents classified according to center name:

Center	Number of boys	Percent
Aml	100	33.33
Elrashad	100	33.33
Tayba	100	33.33
Total	300	100.0

Table (4.2) distribution of respondents classified according to age groups

Age Group	Number of boys	Percent
6-10 years	18	6
10-14 years	152	51
14- <18 years	130	43
Total	300	100

The frequency and percentage of each age group are recorded in table (4.1) the majority is concentrated in the age group (10-14 years) which account 51%.

Table (4.3): Distribution of respondents classified according to the place of birth.

Place of birth	Number of boys	Percent
East	26	9
West	48	16
South	69	23
North	3	1
Khartoum	154	51
Total	300	100.0

Table (4.3) shows the distribution of the respondents according to their place of birth. Most of them were born in Khartoum state (about 51%)

Table (4.4): Distribution of respondents classified according to the place of residence

Place of origin	Number of boys	Percent
east	7	2.33
west	147	49.00
south	122	40.67
north	0	0.00
Khartoum	24	8.00
Total	300	100.00

Table (4.4) gives the distribution of the respondents according to the place of origin of family; the majority of the respondents' families are from the west.

Table (4.5): Distribution of respondents by educational status

Education level	Number of boys	Percent
illiterate	43	14.3
read and write	39	13.0
basic school	209	69.7
secondary school	9	3.0
Total	300	100.0

Table (4.5) shows the distribution of respondents due to level of education, the majority of the boys are literate and there are 69.7% of them were enrolled to basic schools. Some of them left schools and other are still in school.

Table (4.6): Distribution of respondents according to their desire for returning to home

Return to your family	Number of boys	Percent
yes	235	78.3
no	65	21.7
Total	300	100.0

Table (4.6) shows the desire for the children to return to the family home, more than 78% of all cases wanted to return home.

Table (4.7): Distribution of respondents by their desire to belong to another family

Alternative Family	Number of boys	Percent
yes	130	43.3
no	170	56.7
Total	300	100.0

Table (4.7) shows the desire of the respondents to belong to alternative family, the majority of the homeless boys (56.7%) did not want to have alternative family and more than 43% of them wanted to have another family that might be due to the family troubles.

Table (4.8): Distribution of respondents classified according to their relaxing at center/ camp

Relax at center/camp	Number of boys	Percent
yes	252	84.0
no	48	16.0
Total	300	100.0

Table (4.7) shows that whether the camp/center is comforted for children or not. The majority of the respondents mentioned that they were relaxed at the camp/center but in reality they were not serious because they fled from the centers when they have a chance.

Table (4.9): Distribution of respondents by the reasons of uncomfortable in the camp/center

Reasons of uncomfortable	Number of boys	Percent
Relax in camp/center	246	82.00
Miss family	31	10.33
Bad dealing	10	3.33
Place not familiar	13	4.33
Total	300	100

Table (4.8) shows that majority of respondents 82% are relax in leaving in the centers, 10% of them miss their families and the rest of them were complained of bad dealing.

Table (4.10): Distribution of respondents according to if they have friend in camp/center or not.

Friend at center/camp	Number of boys	Percent
yes	275	91.7
no	25	8.3
total	300	100.0

Table (4.9) shows that most of respondents (91.7%) have one ore more friends in the camp/center.

4.2 Factor analysis

This section utilized two of the most popular methods of the parameters estimation, the principal components and the maximum likelihood methods. The solution from either method can be rotated in order to simplify the interpretation of factors and the results obtained from both methods were compared.

Table (4.11) in Appendix (I) shows the R-matrix (or correlation matrix), half of this table contains Pearson correlation coefficient among questions, while the bottom half contains the one-tailed significance of these coefficients. Therefore we can use this correlation matrix to check the pattern of the relationships between the questions.

Factor analysis needs variables that are correlated fairly well, but not perfectly, all questions in table (4.11) in Appendix (I) are correlated fairly well (there is no value greater than .9) that implies there is no need to eliminating any variable at this stage.

The determinant is listed at the bottom of the matrix in table (4.11) in Appendix (I), for this data it is value is 0.000352 which is greater than the minimum necessary value of .00001, therefore the multicollinearity is not a problem for this data.

Table (4.12) shows Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, Bartlett's test of sphericity. The (KMO) value is .808 reveal that factor analysis is appropriate and reliable for this data.

The Bartlett's tests measure the original correlation matrix if it is an identity matrix or not, when applied to our data the result obtained as shown in table (4.11) tell us that our original correlation matrix is not an identical matrix ($p=.000$). Hence the factor analysis I appropriate.

Table (4.12)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.808
Bartlett's Test of Sphericity	Approx. Chi-Square	11360.338
	df	595
	Sig.	.000

/.Table (4.13) list the eigenvalues associated with each linear component before extraction, after extraction and after rotation, extracted from the principal component method. In the same table the eigenvalues associated with each factor represent the variance explained by that particular linear component. The first seven factors explain relatively large amounts of total variance. Factors with eigenvalues greater than one is only extracted in the columns labeled extraction sums of squared loading, there are seven factors with eigenvalues greater than one, and in the final part of the table labeled rotation sums of square loading the eigenvalues of factor after rotation are displayed. Before rotation factor one and two accounted for more variance than the remaining factors , 36.324 and 14.202 compared to 6.808, 5.674, 5.310,3.692 and 3.392 however after rotation it account for 16.156 and 12.075 compared to 11.688, 11.172, 10.059, 7.688 and 6.588 respectively.

Table

(4.13)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.713	36.324	36.324	12.713	36.324	36.324	5.655	16.156	16.156
2	4.970	14.201	50.524	4.970	14.201	50.524	4.226	12.075	28.232
3	2.383	6.808	57.333	2.383	6.808	57.333	4.091	11.688	39.920
4	1.986	5.674	63.006	1.986	5.674	63.006	3.910	11.172	51.092
5	1.859	5.310	68.317	1.859	5.310	68.317	3.521	10.059	61.151
6	1.292	3.692	72.009	1.292	3.692	72.009	2.684	7.668	68.819
7	1.189	3.398	75.407	1.189	3.398	75.407	2.306	6.588	75.407
8	.998	2.851	78.258						
9	.915	2.615	80.873						
10	.803	2.295	83.168						
11	.653	1.867	85.035						
12	.603	1.722	86.757						
13	.569	1.626	88.383						
14	.485	1.386	89.768						
15	.436	1.246	91.014						
16	.406	1.159	92.173						
17	.370	1.058	93.231						
18	.284	.812	94.043						
19	.266	.759	94.803						
20	.259	.740	95.542						
21	.216	.616	96.158						
22	.193	.551	96.709						
23	.189	.541	97.250						
24	.162	.462	97.712						
25	.151	.431	98.143						
26	.131	.374	98.517						
27	.103	.295	98.811						
28	.087	.248	99.060						
29	.078	.223	99.283						
30	.059	.169	99.452						
31	.055	.159	99.611						
32	.043	.123	99.733						
33	.039	.112	99.846						
34	.032	.091	99.936						
35	.022	.064	100.000						

Extraction Method: Principal Component Analysis.

Table (4.14) and Table (4.15) shows the communality before and after extraction, the communality indicate that the amount of variance in each variable that is accounted for, Table (4.14) extracted according to Principal component method, since before extraction there are as many factors as there are variables, so all variance is explained by the factors and communalities are one, but after extraction there are only seven factors which can not explain all of the variance present in the data but they can explain some of it because there are some information lost. Small values indicate variables that do not fit well with the factor solution and should possibly be drooped from the analysis.

Table (4.14): Table of communality by using principle component analysis extraction method

Communalities		
	Initial	Extraction
search for work	1.000	.528
search for food	1.000	.621
disability of pay school fees	1.000	.743
inability of provide family needs	1.000	.808
need of money	1.000	.565
wars at residence place	1.000	.850
drought at place of residence	1.000	.850
femaine at place of residence	1.000	.872
family displacement	1.000	.614
problems in the family	1.000	.705
violence in family	1.000	.702
fear of punishment	1.000	.696
abuse of one of family members	1.000	.804
girl pregnancy	1.000	.751
inequity	1.000	.693
death of father	1.000	.501
divorce of parents	1.000	.719
looking for parents	1.000	.664
step father	1.000	.870
step father	1.000	.860
boarded of stay at home	1.000	.537
looking for friends	1.000	.746
friends conving	1.000	.720
support of friends	1.000	.819
feel free	1.000	.787
no observation	1.000	.744
attraction of city life	1.000	.823
entertainment places	1.000	.786
sillision addiction	1.000	.870
smoking cigarettes	1.000	.865
drinking wines	1.000	.897
bango addiction	1.000	.923
tombak using	1.000	.904
smell benzine	1.000	.886
homelessness of member of family	1.000	.670

Extraction Method: Principal Component Analysis.

Table (4.15): Table of communality by using maximum likelihood analysis extraction method

Communalities (a)		
	Initial	Extraction
search for work	.668	.448
search for food	.788	.562
inability of pay school fees	.784	.472
inability of provide family needs	.760	.527
need of money	.605	.406
wars at residence place	.867	.758
drought at place of residence	.907	.911
feminine at place of residence	.928	.882
family displacement	.602	.421
problems in the family	.691	.597
violence in family	.758	.671
fear of punishment	.763	.558
abuse of one of family members	.827	.797
girl pregnancy	.838	.740
Inequity	.857	.676
death of father	.615	.454
divorce of parents	.814	.571
looking for parents	.771	.583
step father	.905	.842
step father	.877	.868
bored of stay at home	.667	.429
looking for friends	.722	.454
friends convincing	.842	.610
support of friends	.900	.718
feel free	.930	.884
no observation	.923	.865
attraction of city life	.932	.999
entertainment places	.926	.866
sillision addiction	.907	.848
smoking cigarettes	.864	.833
drinking wines	.912	.876
bango addiction	.931	.914
tombak using	.913	.882
smell benzene	.880	.859
homelessness of member of family	.777	.493

Extraction Method: Maximum Likelihood.

a One or more communality estimates greater than 1 were encountered during iterations. The resulting solution should be interpreted with caution.

According to Kaiser's criterion (only factors with eigenvalues greater than one should be extracted), this criterion is accurate when the average communalities is greater than .6 and the sample size is not less than 250. From table (4.14) the average communalities according to Principal component method can be calculated as following: -

$$(.528+.621+....+.670)/35$$

$$15.09124/35 = .713657$$

Since the sample size is 300 and average communalities are (.713657) so Kaiser's will be use and seven factors will be extracted.

Table (4.16) and table (4.17) represent the correlation matrix between the seven factors. This matrix contain the correlation coefficients between factors as predicted from the rotated component matrix and the rotated factor matrix (see table (4.18) and table (4.19) in Appendix (I)), according to principal component and Maximum Likelihood as Extraction Method, if the orthogonal rotation (Varimax) were completely appropriate then we expect a symmetric matrix, since both matrixes are very unsymmetrical then we must convert to oblique rotation (Oblimin).

Table (4.16)

Component Transformation Matrix

Compon ent	1	2	3	4	5	6	7
1	.482	.444	.327	.431	.379	.293	.221
2	-.592	-.167	.611	.189	.300	-.279	.209
3	.598	-.689	.220	.117	-.005	-.324	-.033
4	.195	.296	.384	-.695	.250	-.223	-.363
5	.124	.187	.293	-.242	-.634	-.110	.626
6	-.080	-.146	.486	.087	-.424	.578	-.463
7	-.016	-.396	-.029	-.464	.350	.578	.412

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Table (4.17)

Factor Transformation Matrix

Factor	1	2	3	4	5	6	7
1	.305	.138	.352	.016	.264	.058	.831
2	.612	.318	.153	.446	.177	.299	-.427
3	-.631	.221	-.121	.632	.189	.283	.154
4	-.336	.110	.893	-.110	-.082	-.021	-.243
5	-.103	-.041	-.070	-.526	.336	.766	-.076
6	-.109	.580	-.143	-.276	.575	-.452	-.142
7	-.001	.693	-.127	-.193	-.643	.189	.134

Extraction Method: Maximum Likelihood.

Rotation Method: Varimax with Kaiser Normalization.

1- Principal component results:

Table (4.20) shows the components matrix from which the rotated structure matrix in table (4.21) was obtained according to principal components as a method of extraction and direct oblimin as a method of rotation.

Table (4.21) show that the questions that load highly in factor 1 includes, “I leave my home because I am looking for friends, bored of stay at home , homelessness of member of family”, which explains 16.156 % from the total variance as shown in table (4.13).

Similarly four questions load highly in factor 2 includes “I leave my home because of famine at place of residence, drought at place of residence, wars at residence place, looking for parents and family displacement”, which explains 12.075% from total variance.

On the other hand the questions that loaded highly on the third factor includes, “I leave my home because of these risk behaviors tombak using, drinking wines, smell benzene, smoking cigarettes, Sillision addiction” which explains 11.688% from the total variance.

Because of no supervision in street most of homeless children had risk behaviors, they are very young to know the hazard of these bad habits and it was very difficult for them to abandon bad habits.

Seven questions that load high in factor 4 included. “abuse of one of family members, fear of punishment, violence in family, problems in the family, girl pregnancy, divorce of parents, inequity”, which explains 11.172% from the total variance

Two questions are load highly in factor 5 the first questions are “I leave my home because of bad dealing of my step mother, the second question is bad dealing of my step father”, which explains 10.059% from the total variance.

Six questions load high in factor 6, “attraction of city life, entertainment places, feel free, no observation, support of friends, friends convincing lead to leaving home” , which explains 7.688% from the total variance.

Finally five questions load highly in the last factor the first questions are “I left home to search for food, the second because of need of money, disability of provide family needs and the third is because of death of father and the last is to search for work” , which explain 6.588% from the total variance.

**Table (4.20): Component matrix which rotated from structure matrix
Component Matrix (a)**

	Component						
	1	2	3	4	5	6	7
inequity	.793	.092	-.124	-.101	-.131	-.116	.001
girl pregnancy	.791	.170	-.142	-.204	-.174	-.062	-.034
support of friends	.708	-.288	-.467	.055	.113	-.026	.001
tombak using	.679	-.499	.426	.091	.026	-.058	.026
sillision addiction	.667	-.535	.273	.205	.130	-.047	-.056
bango addiction	.666	-.514	.389	.160	.160	-.109	-.036
divorce of parents	.657	.335	.009	-.040	-.174	.031	-.377
smoking cigarettes	.654	-.506	.418	.076	.000	.005	.028
drinking wines	.653	-.530	.418	.075	-.049	-.080	.015
violence in family	.651	.159	.070	-.483	.010	.078	-.094
friends convincing	.640	-.255	-.479	-.077	.077	-.055	.030
smell benzene	.638	-.529	.401	.072	.174	.000	-.048
attraction of city life	.630	-.321	-.172	-.263	-.116	.333	.314
search for food	.628	.410	.069	.135	-.158	-.069	.073
feel free	.613	-.360	-.383	.168	.018	.308	.109
entertainment places	.607	-.341	-.142	-.256	-.119	.293	.339
fear of punishment	.602	.034	.105	-.401	-.128	.153	-.347
looking for parents	.600	.454	-.069	.143	.172	-.106	-.180
abuse of one of family members	.593	.107	.135	-.573	-.238	.180	-.077
problems in the family	.589	.287	.176	-.408	-.082	-.187	-.190
no observation	.588	-.388	-.378	.170	.061	.263	.057
looking for friends	.585	-.136	-.373	.227	.153	-.122	-.394
homelessness of member of family	.572	.039	-.428	-.047	.325	-.224	-.006
inability of provide family needs	.566	.288	-.079	.156	-.381	-.282	.386
death of father	.562	.212	-.031	.213	-.280	-.065	-.111
bored of stay at home	.555	-.141	-.273	.318	.016	-.135	-.124
inability of pay school fees	.550	.208	.011	.140	-.397	-.415	.216
search for work	.545	.201	-.095	.248	-.284	.113	-.164
step father	.537	.406	.083	-.262	.508	-.191	.216
famine at place of residence	.494	.665	.141	.167	.267	.257	.012
drought at place of residence	.419	.659	.216	.202	.184	.331	.094
wars at residence place	.509	.616	.251	.253	.147	.114	.225
family displacement	.383	.439	.075	.291	.224	.344	-.128
step father	.535	.277	-.033	-.272	.546	-.266	.231
need of money	.410	.348	.110	.214	-.442	.074	.130

Extraction Method: Principal Component Analysis.
a 7 components extracted.

Table (4.21): Structure matrix obtained according to principle components analysis

Structure Matrix

	Component						
	1	2	3	4	5	6	7
looking for friends	.839	.190	.386	-.276	.136	.348	.208
bored of stay at home	.656	.183	.407	-.161	.085	.373	.358
homelessness of member of family	.618	.194	.235	-.289	.558	.399	.267
famine at place of residence	.176	.914	.072	-.379	.308	.023	.357
drought at place of residence	.042	.907	.046	-.314	.204	.007	.356
wars at residence place	.069	.856	.161	-.291	.308	.018	.535
family displacement	.256	.762	.100	-.233	.072	.059	.186
looking for parents	.503	.629	.187	-.440	.347	.063	.456
bango addiction	.298	.096	.955	-.269	.161	.371	.196
tombak using	.198	.086	.947	-.338	.105	.412	.263
drinking wines	.183	.023	.936	-.338	.053	.407	.275
smell benzene	.231	.088	.932	-.307	.142	.405	.108
smoking cigarettes	.166	.081	.922	-.336	.060	.433	.236
sillision addiction	.372	.092	.919	-.242	.098	.445	.188
abuse of one of family members	-.016	.214	.311	-.857	.188	.369	.320
fear of punishment	.222	.237	.383	-.806	.106	.293	.210
violence in family	.148	.309	.333	-.796	.384	.340	.296
problems in the family	.157	.296	.284	-.781	.365	.061	.426
girl pregnancy	.408	.346	.367	-.721	.302	.450	.603
divorce of parents	.441	.513	.268	-.708	.064	.140	.482
inequity	.445	.320	.438	-.625	.304	.454	.604
step father	.215	.362	.229	-.370	.884	.185	.249
stepmother	.131	.494	.203	-.429	.839	.108	.287
attraction of city life	.125	.061	.479	-.439	.163	.858	.258
entertainment places	.097	.029	.488	-.408	.167	.831	.260
feel free	.513	.151	.473	-.184	.029	.820	.205
no observation	.539	.115	.480	-.164	.042	.777	.158
support of friends	.696	.093	.478	-.305	.287	.718	.298
friends convincing	.604	.019	.388	-.333	.321	.683	.277
disability of provide family needs	.193	.315	.207	-.296	.193	.264	.883
disability of pay school fees	.238	.217	.284	-.332	.156	.143	.843
search for food	.264	.577	.254	-.465	.193	.158	.683
need of money	.059	.456	.130	-.316	-.150	.120	.657
death of father	.393	.398	.278	-.401	-.033	.182	.595
search for work	.420	.447	.240	-.391	-.140	.254	.517

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

2-Maximum likelihood result

Table (4.22) shows the factor matrix from which the rotated structure matrix in table (4.23) was obtained according to maximum likelihood as a method of extraction and direct oblimin as a method of rotation.

Two questions that have a high load in the first factor which are “attraction of city life and entertainment places in cities lead me to leave home”, this factor might be called attraction of city life.

Sex questions load high in the second factor which is the “desire of bango addiction, smell benzene, sillision addiction, smoking cigarettes tombak using, drinking wines”, this factor can be labeled Risk behavior.

Natural and environmental factors can lead to homelessness such as “drought at place of residence, famine at place of residence; wars at residence place” load highly in the third factor, this factor can be natural and environmental.

Two questions load high in factor four, “no observation, feel free”, this factor can be labeled observation.

Two questions load highly in factor five the first questions are “step mother, the second question is step father” and the last question is divorce of parent lead child to leave home, this factor can be labeled family disruption.

Five questions load highly in factor six “disability of family to pay school fees, search for work, need of money, disability of family to provide my needs and abuse of one of family member”, load highly in factor six, this factor can be labeled economic reasons.

Two questions load high in last factor, “violence in family, fear of punishment” this factor can be family abuse.

**Table (4.22): Factor matrix which rotated from structure matrix
Factor Matrix (a)**

	Factor						
	1	2	3	4	5	6	7
attraction of city life	.999	-.026	.007	-.005	-.002	-.002	.001
entertainment places	.928	.002	-.044	-.007	.052	-.013	.032
support of friends	.562	.353	-.102	.465	.133	-.003	.183
friends convincing	.538	.263	-.073	.412	.223	.051	.152
Inequity	.498	.497	.175	.221	.145	.261	.110
abuse of one of family members	.494	.276	.212	-.138	.236	.478	-.359
girl pregnancy	.492	.469	.265	.201	.198	.358	.013
bored of stay at home	.399	.316	-.041	.262	-.039	.001	.314
bango addiction	.429	.679	-.491	-.132	-.029	-.095	.027
smell benzene	.457	.617	-.480	-.145	-.024	-.085	-.099
sillision addiction	.464	.617	-.483	-.030	-.074	-.092	.065
tombak using	.504	.610	-.463	-.199	-.024	.014	.008
drinking wines	.482	.587	-.501	-.201	-.035	.079	.020
smoking cigarettes	.490	.581	-.463	-.183	-.054	.056	-.037
looking for parents	.146	.549	.424	.167	.079	.032	.212
search for food	.192	.548	.373	.103	-.027	.236	.136
step father	.230	.511	.491	-.080	.439	-.294	-.025
divorce of parents	.332	.437	.342	.009	.013	.365	.137
violence in family	.392	.435	.237	.024	.306	.284	-.312
family displacement	.060	.419	.417	.050	-.249	-.035	-.040
inability of pay school fees	.214	.414	.156	.091	.016	.349	.316
search for work	.188	.413	.168	.249	-.136	.335	.146
problems in the family	.299	.413	.283	-.161	.334	.343	-.046
fear of punishment	.374	.400	.114	.002	.110	.300	-.309
death of father	.303	.365	.207	.069	-.136	.266	.304
drought at place of residence	.106	.471	.707	-.140	-.379	-.105	-.059
famine at place of residence	.102	.545	.707	-.049	-.243	-.091	-.071
wars at residence place	.112	.564	.597	-.116	-.199	-.092	.102
no observation	.522	.300	-.215	.637	-.117	-.083	-.171
feel free	.569	.289	-.171	.623	-.178	-.068	-.154
looking for friends	.313	.395	-.053	.405	.032	.017	.179
homelessness of member of family	.323	.364	.169	.366	.269	-.094	.113
Stepmother	.241	.483	.376	.028	.569	-.332	.009
need of money	.175	.282	.281	-.017	-.231	.354	.196
disability of provide family needs	.286	.356	.269	.117	.006	.371	.377

Extraction Method: Maximum Likelihood.
a 7 factors extracted. 12 iterations required.

Table (4.23): Structure matrix obtained according to maximum likelihood analysis
Structure Matrix
Pattern Matrix (a)

	Factor						
	1	2	3	4	5	6	7
attraction of city life	.961	.045	-.017	.052	-.036	-.030	-.064
entertainment places	.867	-.022	-.070	.030	.020	-.007	-.042
drought at place of residence	.090	.964	.039	-.048	-.003	-.011	.014
famine at place of residence	.001	.870	.051	.031	.125	.008	-.070
wars at residence place	.015	.743	-.080	-.105	.178	.161	.069
family displacement	-.067	.601	-.015	.133	.002	.043	-.024
bango addiction	-.053	.022	-.979	.015	.064	-.019	.060
smell benzene	-.011	.036	-.927	.043	.020	-.146	-.048
drinking wines	.027	-.072	-.925	-.076	-.066	.069	-.059
tombak using	.054	-.016	-.923	-.066	-.010	.020	-.036
smoking cigarettes	.041	-.015	-.888	-.033	-.075	.002	-.087
sillision addiction	.005	.012	-.884	.112	.024	.025	.111
no observation	.109	.050	-.114	.864	-.059	-.138	-.083
feel free	.181	.111	-.088	.850	-.109	-.111	-.064
support of friends	.204	-.142	-.118	.476	.224	.260	.028
looking for friends	-.022	-.033	-.142	.418	.154	.280	.056
friends convincing	.226	-.228	-.032	.393	.248	.251	-.063
step father	.036	.130	-.052	-.034	.868	-.113	-.107
step father	.065	.315	-.050	-.120	.760	-.118	-.128
homelessness of member of family	.053	-.005	.043	.338	.444	.152	-.040
inability of provide family needs	.105	.043	.026	-.027	.082	.659	-.013
inability of pay school fees	-.040	-.020	-.100	-.023	.038	.627	-.088
death of father	.123	.154	-.075	-.007	-.053	.552	.016
need of money	.063	.239	.009	-.068	-.209	.494	-.091
search for work	-.111	.120	-.029	.244	-.113	.472	-.160
divorce of parents	.087	.163	-.015	-.048	.029	.472	-.283
search for food	-.094	.284	-.050	.073	.107	.416	-.184
Inequity	.116	.009	-.085	.203	.170	.388	-.279
bored of stay at home	.180	.001	-.165	.224	.108	.372	.209
looking for parents	-.096	.297	-.003	.099	.341	.367	-.019
abuse of one of family members	.196	-.023	-.007	-.059	-.040	.001	-.832
violence in family	.015	.036	-.047	.107	.191	-.036	-.698
fear of punishment	-.001	.055	-.137	.123	-.062	.006	-.658
problems in the family	.030	-.031	-.079	-.221	.244	.247	-.528
girl pregnancy	.110	.001	.020	.188	.155	.360	-.458

Extraction Method: Maximum Likelihood.
 Rotation Method: Oblimin with Kaiser Normalization.
 a Rotation converged in 14 iterations.

Table (4.24) and table (4.25) represent the correlation matrix between the factors. This matrix contain the correlation coefficients among components as predicted from the structure matrix in table (4.22) and table(4.23) , From table (4.24) component 2 and component 5 have little or no relation with other components, while component 1, component 3, component 4, component 6 and component 7 interrelated to some degree. From table (4.25) all components interrelated to some degree.

If the components are independent then component correlation matrix should be identity matrix (all factors should have correlation coefficient of zero), and the results which obtained from the oblique rotation should be identical with that one obtained from the orthogonal rotation, since this is not the case therefore independent can not be existed . The orthogonal results should not be trusted and the oblique rotation solution is more meaningful.

Table (4.24)

Component Correlation Matrix

Component	1	2	3	4	5	6	7
1	1.000	.186	.262	-.166	.107	.293	.225
2	.186	1.000	.090	-.321	.149	.012	.372
3	.262	.090	1.000	-.321	.107	.430	.228
4	-.166	-.321	-.321	1.000	-.221	-.256	-.376
5	.107	.149	.107	-.221	1.000	.112	.105
6	.293	.012	.430	-.256	.112	1.000	.181
7	.225	.372	.228	-.376	.105	.181	1.000

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

Table (4.25)

Factor Correlation Matrix

Factor	1	2	3	4	5	6	7
1	1.000	.012	-.452	.380	.196	.248	-.331
2	.012	1.000	-.075	.036	.268	.409	-.322
3	-.452	-.075	1.000	-.393	-.193	-.284	.309
4	.380	.036	-.393	1.000	.224	.314	-.114
5	.196	.268	-.193	.224	1.000	.262	-.280
6	.248	.409	-.284	.314	.262	1.000	-.378
7	-.331	-.322	.309	-.114	-.280	-.378	1.000

Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization.

Chapter five

Conclusion and Recommendations

5.1 Conclusions:

The study aims to find out the main factors of homelessness among street children in rehabilitations centers in Khartoum State, the study covered 300 males of street children who are reside in rehabilitation centers in Khartoum state and their age between (6- <18) years old.

Many questions were asked regarding the causes behind their leaving home. Many facts were obtained which are summarized in the following

1. The study resulted that most of street children usually get involved in risky behaviors like drinking alcohol, drugs abuse and crimes
2. The study showed that family disruption is one of the main factors behind children homelessness.
3. The study showed that most of the street children leave their home due to attraction of city life.
4. The study notes that most of the families of street children are displaced, they leave their residence areas due to natural and political reasons and when they came to Khartoum they live in suburbs, suffer of poverty so they can't cover their children's needs.
5. Finally the study showed that parents' abuse is one of the main factors lead children to leave home.

5.2 Recommendations:

5.2.1: Interventions for Solving Homelessness Problem:

Case Study of USA:

American government at all levels was active in the homeless area during 1980s and 1990s. Housing and Urban Development (HUD's) 1998 study, collecting data in first quarter of 1998 before anything but a trickle of federal money was actually in use, found that the total dollars committed to shelter services in the United States had climbed to 1.6 billion \$, from 300 million in 1984.

In 1987, homelessness had been visible long enough, was extensive enough, and had been documented enough through research that Congress inaugurated a major federal effort to address it through the Stewart B.

Mickinney Homeless Assistance Act:

Most Mickinney Act Programs required their recipients to match federal dollars with a certain percentage of other funds, for states and localities that had long been spending their own tax dollars to serve homeless people.

Much of Mickinney Act money went in early years towards fixing or building structures that could serve as shelters, as the years has passed, the use of Mickinney Act money have shifted after new shelters and expanding the national capacity to shelter homeless people.

New Policy Orientations:

During the Reagan administration, Mickinney Act Programs were funded significantly below their authorized levels. The Bush Administration supported some additional funding, but it took the installation of a new Democratic administration in 1993 for homeless policy in Washington to take a new turn.

The first actions of the Clinton Administration were to increase funding for McKinney Act Programs.

A second major policy shift was initiated by department of HUD; the new administration promoted the related ideas of continuum of care and coordinated services. That the administration wanted communities to make care available to each level or stage on a continuum that might need by homeless people. This includes intake and assessment, emergency shelter,

transitional shelter, and specialized services such as alcohol and drug treatment.

Another policy change in 1990s was increased attention to rural homelessness.²³

The researcher recommends the following:

(1) For children already living in the street:

1. Increase all children's access to formal and/or informal schooling; this may be most effective for younger children of primary school age.
2. Trust building with children on the streets and encouraging them to leave the streets voluntary. "The government form of gathering street children is by arresting them, this strategy reduces the number of children on the street on short term, but often children return to the streets when free".
3. Provide safe night shelters for street children to protect them from sexual assault.
4. Help street children to contact and reintegrate into their families/communities.
5. Help street children to overcome their addiction to substances like sillision and unlearn behaviors such as aggressiveness.

(2) For causes of homelessness:

1. Intervening at home to prevent children from coming to the streets.
2. Reduce the family burden of educational costs.
3. Create opportunities to increase incomes of vulnerable families, especially those families that have been affected by war, drought or internal displacement
4. Establish programs with local hospitals and clinics for street children to obtain free medical treatment
5. Reform and improve legislations and laws for child protection.
6. Make the rehabilitation centers children's friendly to convince children with rehabilitation centers is the best alternative of family.

²³ Wikipedia – 2003 - The free Encyclopedia.

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Factors Affecting Homelessness Research's Questionnaire

The information collected was for the sake of research for MSC. And the title is (Factors Affecting Homelessness Among Street Children In Khartoum State). The information given shall not be used or published for any other purpose but only used for scientific methods required for the research.

After knowledge of the purpose of the research you have complete option to answer or refuse totally or partially the questions during any stage of writing the answers.

Personal Data:

1. Age.....
2. Place of birth.....
3. Place of origin.....
4. Education level: illiterate read and write basic
Secondary
5. Do you desire to return to your family yes No
6. Do you desire to belong to alternative family yes No
7. Do you relax at centre/camp Yes No
8. If the answer no why.....
9. Do you have a friend at centre/camp Yes No

Factors of Homelessness

Do you think	Agree	Do not know	Refuse
1. search for job push the child to the street			
2. Search for food push the child to the street			
3. inability to pay school fees push the child to the street			
4. inability to provide family's need push the child to the street			
5. need for money push the child to the street			
6. wars in origin place push the child to the street			
7. drought in origin place push the child to the street			
8. famine in origin place push the child to the street			
9. family displacement push the child to the street			

	Agree	Do not know	Refuse
10. violence in home push the child to the street			
11. family troubles push the child to the street			
12. fear of punishment push the child to the street			
13. sexual assault of family's member push the child to the street			
14. girl pregnancy push her to the street			
15. inequity in treatment between family members push the child to the street			
16. death of father push the child to the street			
17. parent's divorce push the child to the street			
18. looking for parents push the child to the street			
19. cruel stepmother push the child to the street			
20. cruel stepfather push the child to the street			
21. boring home push the child to the street			
22. looking for friends push the child to the street			
23. homelessness of one of family member encourage the child to go to the street			
24. friend's convenience push the child to the street			
25. friend's support in the street push the child to the street			
26. freedom in the street encourage the child to the street			
27. lack of observation encourage the child to the street			
28. entertainment places in city (cinemas) push the child to the street			
29. attraction of city life encourage the child to the street			
30. desire in addiction sillision push the child to the street			
31. desire in drinking wine push the child to the street			
32. desire in smoking bango push the child to the street			
33. desire in smoking cigarettes push the child to the street			
34. desire in addiction tombak push the child to the street			
35. desire in smelling benzene push the child to the street			

Rotated Component Matrix ^a

	Component						
	1	2	3	4	5	6	7
bango addiction	.918	.221	.046	.092	.068	.076	.105
tombak using	.902	.121	.024	.162	.145	.159	.052
smell benzine	.897	.168	.053	.152	-.028	.142	.080
drinking wines	.893	.109	-.043	.176	.175	.155	.005
smoking cigarettes	.878	.098	.028	.169	.120	.200	.007
sillision addiction	.862	.311	.047	.066	.060	.137	.032
looking for friends	.219	.809	.109	.160	.056	-.036	.021
support of friends	.259	.725	-.006	.128	.138	.400	.175
friends convining	.171	.645	-.087	.188	.134	.409	.218
homelessness of member of family	.046	.624	.085	.142	.106	.138	.470
boarded of stay at home	.265	.624	.099	.002	.253	.067	.008
no observation	.306	.586	.081	.000	.021	.544	-.061
drought at place of residence	-.025	-.064	.877	.131	.181	.049	.150
femaine at place of residence	-.027	.068	.866	.191	.154	.002	.236
wars at residence place	.085	-.053	.787	.059	.377	.019	.273
family displacement	.028	.173	.758	.090	.016	.001	-.003
looking for parents	.040	.399	.517	.270	.273	-.145	.260
abuse of one of family members	.148	-.057	.089	.799	.160	.314	.093
fear of punishment	.232	.162	.133	.763	.032	.124	-.012
problems in the family	.147	.059	.141	.704	.271	-.083	.289
violence in family	.163	.099	.184	.703	.100	.221	.281
divorce of parents	.098	.330	.381	.595	.305	-.076	-.050
girl pregnancy	.140	.350	.173	.551	.425	.240	.195
inequity	.227	.384	.154	.436	.436	.217	.207
disability of provide family needs	.055	.121	.143	.070	.837	.178	.182
disability of pay school fees	.157	.144	.038	.141	.809	-.003	.146
need of money	.036	-.034	.356	.160	.607	.106	-.175
search for food	.112	.154	.441	.261	.549	.037	.136
death of father	.141	.299	.277	.245	.495	-.003	-.099
search for work	.094	.342	.351	.244	.404	.081	-.222
attraction of city life	.293	.180	-.011	.285	.120	.776	.075
entertainment places	.315	.149	-.042	.256	.134	.756	.089
feel free	.288	.561	.112	.006	.064	.606	-.075
step father	.106	.182	.257	.206	.066	.071	.836
step father	.091	.073	.392	.260	.094	.035	.791

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Rotated Factor Matrix a

	Factor						
	1	2	3	4	5	6	7
bango addiction	.913	.116	.208	.050	.070	.118	.043
tombak using	.887	.154	.147	.016	.165	.061	.137
drinking wines	.884	.182	.129	-.032	.173	.007	.116
smell benzine	.880	.020	.210	.049	.157	.080	.078
smoking cigarettes	.858	.139	.154	.014	.197	.002	.124
sillision addiction	.851	.145	.299	.032	.023	.073	.083
disability of provide family needs	.062	.660	.135	.162	.113	.137	.106
disability of pay school fees	.150	.626	.109	.111	.155	.092	-.005
death of father	.146	.582	.132	.230	.090	.017	.125
divorce of parents	.109	.568	.080	.281	.355	.118	.105
search for food	.101	.527	.149	.394	.249	.177	-.056
need of money	.040	.525	-.004	.294	.151	-.126	.066
search for work	.097	.523	.274	.217	.188	-.051	-.073
inequity	.227	.512	.366	.147	.363	.236	.141
looking for parents	.046	.469	.196	.405	.111	.375	-.071
boarded of stay at home	.256	.395	.390	.052	-.082	.129	.172
no observation	.286	.028	.866	.053	.121	-.038	.116
feel free	.275	.062	.863	.103	.118	-.076	.175
support of friends	.282	.337	.647	-.054	.079	.237	.203
friends convining	.204	.313	.564	-.126	.148	.257	.220
looking for friends	.229	.334	.511	.047	.015	.164	.004
homelessness of member of family	.074	.250	.456	.097	.115	.438	.058
drought at place of residence	-.028	.220	-.052	.914	.107	.095	.065
femaine at place of residence	-.030	.246	.029	.863	.172	.211	-.005
wars at residence place	.072	.340	-.037	.753	.066	.254	.014
family displacement	.024	.201	.107	.594	.086	.063	-.058
abuse of one of family members	.156	.206	.027	.094	.815	.071	.225
violence in family	.166	.183	.175	.168	.690	.267	.066
fear of punishment	.235	.201	.159	.156	.640	.032	.055
problems in the family	.148	.371	-.077	.124	.557	.316	.075
girl pregnancy	.143	.506	.325	.157	.510	.232	.136
step father	.100	.063	.144	.244	.213	.852	.050
step father	.087	.088	.043	.405	.245	.772	.073
attraction of city life	.286	.130	.343	.010	.259	.052	.844
entertainment places	.310	.130	.320	-.041	.227	.094	.768

Extraction Method: Maximum Likelihood.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

