

Influence of Khat (Miraa) on Primary School Dropout Among Boys in Meru County, Kenya

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Despite introduction of Kenya's Free Primary Education in 2003 to achieve Universal Primary Education (MDG2), primary school boys' enrolment in Kangeta is declining while dropout rates are increasing. This study investigated the influence of Khat (*Catha edulis*) on the boys' dropout rates. A cross-sectional design was used to collect data from 210 randomly selected dropouts and 10 primary school head teachers. Content validity of the teachers' questionnaire and boys' interview guide was ascertained by education experts, while reliability coefficients determined through a pilot test was 0.83 α and 0.72 α respectively. Peer pressure, Khat chewing, and easy money from Khat trade forced boys to leave school. Khat was highly regarded, socially accepted, and promoted the local people's economy and culture but was partly responsible for the boys' dropout. About 62% of the dropouts regretted leaving school and would re-enroll if given a chance. About 89% of the money from Khat was spent on food rather than investment. Parents and education stakeholders should help pupils complete education by discouraging them from engaging in Khat. Those involved in Khat should be encouraged to invest part of their income.

Keywords: boys' school dropout, education, Khat consumption, Khat production

Investing in people's education improves a country's general welfare, economic growth and poverty reduction (Kuebler, 2011). Education has immense impact on society. It is a great equalizer if all children have equal opportunity to take advantage of it (Young, 2000). It trains the mind to think and make correct decisions (Manu, 2007). Through it, knowledge and information are received and spread throughout the society, and in order to achieve the Second United Nations Millennium Development Goal (MDG2) on Universal Primary Education (UPE) by 2015, governments particularly in developing countries must allocate enough money for public provision of education (Cohn & Johnson, 2006). Education is essential for enhancing a country's competitiveness in the global market (Kess, 2005). In Kenya, education has been characterized by declining enrolment and low completion rates.

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Kenya introduced Free Primary Education (FPE) in 2003 to enable every child have access to basic education and to improve retention rate. Education Management Information System (EMIS) showed that the country registered a national dropout rate of 2.0%-6.5% from 2003 to 2007. This trend of declining enrolment rates and cases of high dropouts, though expected to be minimal with FPE, is notable (EMIS, 2009).

In Kangeta Division with 26 public primary schools, boys' enrolment declines as the boys reach upper primary particularly class 6-7 with class 8 having the fewest number of students. In Kangeta Division, 10 out of the 26 schools had an average dropout rate of 18.3% (Igembe South District Education Monthly Bulletin, 2011). In all predominant Miraa producing areas, boys are more affected than girls. This necessitates an investigation on whether dropout rate is linked to Khat production, trade and consumption, which are the area's main economic activities.

Khat, often referred to as "greed god", is a seedless, evergreen and hardy plant that grows in a variety of climate and soils whose twigs and leaves are harvested throughout the year (Alem, Kebede, & Kullgren, 1999; Michela, 2005). The plant requires extensive labour during picking, packing and transportation to drop-off points for collection. Male youth and boys of school-going age are the main source of labour, which earns them quick money that entices them to abandon school (Wanja, 2010).

Boys who are barely 10 years old fail to enroll in school partly to pick Khat (Agence, 2010). They work from 6-9 a.m. and then hang around for the rest of the day chewing Khat (Kinoti, 2007). The Meru North District Strategic Plan (2005-2010) revealed that the labour force in the region consisted 49.7% of the total population and was composed mainly of school dropouts (boys) who engaged in Khat small-scale and micro-enterprises. In 2012, the Education Permanent Secretary was concerned over the alarming rate at which boys in the region were dropping out of school to be employed as casual labourers in Miraa farms, which gave them easy money (Sum, 2013). This implies that there could be a link between boys' school dropout and Khat production and trade.

Khat leaves are chewed for stimulation and euphoria effects (Kyalo, 2010; Maithya, 2009). Khat is dominantly chewed by males although few females also chew the substance (Alem et al., 1999). This is true of Kangeta Division. More males chew Khat than women and the habit is rampant among school-going boys (Wanja, 2010). Khat predisposes the users to unstable and abnormal behavior. Loss of concentration, lack of interest, anxiety, stress and fatigue are some of the consequences of chewing Khat (Kyalo, 2010; Maithya, 2009). It is this behavior which to some extent seems to influence the school boys to drop out of school. The question the study sought to answer is: What is the influence of Khat on the primary school boys' school dropout?

Statement of the Problem

Despite global efforts to achieve UPE, many children may still be out of school by 2015 partly due to loss of parents, school location, child labour, and drug addiction. Kangeta Division is a big producer of Khat which is its main economic activity. Because Khat trade is lucrative, one would expect that parents would use the money earned from it to pay school fees and to improve school attendance and retention, which is not the case in Kangeta Division. Apart from providing cheap labour in Khat production, these boys engage in Khat trade and chewing. The combined influence of labour provision in Khat farms, trade and chewing on primary school boys' school dropout was not well documented. It was not clear whether Khat production, trade and chewing contributed to primary school boys' dropout in Kangeta Division. Therefore, the study sought to provide the

missing information.

Purpose and Objectives of the Study

The study sought to determine the influence of Khat production, trade and chewing on dropout among primary school boys of Kangeta Division in Igembe South District.

The study objectives were to establish:

- (1) Whether primary school boys' school dropout in Kangeta Division resulted from providing the required labour in Khat production;
- (2) Whether Khat chewing by primary school boys in Kangeta Division led to their school dropout;
- (3) The extent to which Khat trade by primary school boys in Kangeta Division influenced them to drop out of school.

Research Focus

It is generally assumed that a person may not be sensible enough unless he/she is educated. Education—an absolute necessity for economic and social development—is a good investment for the future. It is vital for a nation's sustainable growth and development and may help in poverty reduction (Jones, 2011). An educated nation will conserve and use her natural resource sustainably and will receive and spread knowledge and information to others (Manu, 2007). The MDG2 is on UPE (Liesbet & Geraldine, 2010).

Recognizing education as a welfare indicator and a key determinant of earnings, the Kenya Government has over the years tried to reduce poverty through increased budgetary allocation to poverty reduction programs in education, the major one being FPE, which was introduced in 2003 and enabled millions of children to attend school (Kamotho, 1999). Nevertheless, poor students' school enrolment and increased dropout have persisted in Kangeta Division particularly among primary school boys partly due to Khat production. Children of school-going age are involved in Khat growing through provision of cheap labour in Khat farms at the expense of schooling (Sum, 2013). Young boys climb up the Khat tree, pick the soft twigs and leaves and then ferry them to various collection points. They also engage in Khat trade and Khat chewing at the expense of schooling, which poses a big challenge to the Kenyan leaders in their efforts to improve school access and retention rates (Agence, 2010).

Khat (*Catha edulis*), which has the same climatic and soil requirements as Arabic coffee, was grown first in Harar, Ethiopia before spreading to East, Central and Southern parts of Africa (Alem et al., 1999). In Kenya, Khat—popularly known as green gold—is predominantly grown in Meru although it also grows in other parts of Kenya such as Embu and Mbeere Districts (Michela, 2005). It is highly regarded and socially accepted by most growers in Kangeta Division who are small scale farmers. Labour in Khat production is mainly dominated by male youth and young boys of school-going age. Instead of being in school, these boys provide cheap labour that earns them quick money that entices them to drop out of school (Agence, 2010). Khat leaves and soft twigs are chewed for stimulants and euphoria effects (Maithya, 2009). Kyalo (2010) and NACADA (2008) have shown that Khat's chemical composition predisposed the users to abnormal behaviour, which affected the school-going boys' concentration in their studies forcing them to drop out of school (Wanja, 2010). Due to Khat's drug effects, the Ministry of Education (MoE) should train school heads, teachers and inspectors on the dangers of its abuse and consequences and should mobilize school children to play a leading role in curbing drug abuse.

Methodology of Research

The study used a cross-sectional design to collect data at one point in time from 210 randomly selected dropouts and 10 primary school head teachers as recommended for this design by Paul (2011). The design is faster and inexpensive compared to case and cohort studies. It provides self-reported facts about respondents, their feelings, attitudes, opinions and habits (Kombo & Tromp, 2008; Kothari, 2008). It is an excellent vehicle for collecting original data for purposes of studying large populations. With this design, a large population can be studied with only a portion of it being used to provide the required data (Kothari, 2008).

Instrumentation and Data Collection Procedures

Based on the objectives of the study, a self-administered questionnaire developed by the researcher with open- and closed-ended items was used for head teachers and an interview guide for the school dropouts. The questionnaire contained information on the influence of boys' participation in Khat's production, trade and chewing in Kangeta Division on school enrolment and dropout rates. The questionnaires' content validity was ascertained by five peers and five extension experts while reliability was ascertained through a pilot test involving 30 school dropouts and 4 primary school head teachers from Maua Division, which had similar characteristics as Kangeta Division. This indicated that the questionnaire and interview guide had a reliability coefficient of 0.83α and 0.72α respectively, which were above the 0.70 minimum acceptable for educational research at a confidence level of 0.05 set *a priori*.

Prior to data collection, the researchers conducted a preliminary survey of the head teachers to familiarise themselves with them and their schools. An official request to undertake the study and access information from the schools was sought from the Commission for University Education (CUE) through the Board of Post Graduate Studies. The researcher explained the purpose of the study before administering the questionnaire and remained with the respondents throughout the exercise to answer any questions. The researcher administered the interview guide and recorded the subjects' responses for later transfer into an electronic data base for further analysis using Statistical Package for Social Sciences (SPSS) Version 17.

Data Analysis

Data was analysed using qualitative and quantitative methods. Qualitative data was evaluated, classified into categorized themes based on the objectives of the study and then coded. Analysis of qualitative data was an on-going process where emerging trends were categorized based on research questions. Quantitative data were coded and analysed using the SPSS. A chi-square test was used to test the association between the selected variables while a *t*-test was used to determine the difference between two means. Frequency tables and percentages were used to summarize and present the quantitative data.

Results of Research

Age Distribution of the School Dropouts

About 52.9% of the boys were 15-19 years old, 29% were 20-24 years old, 10.5% were 10-14 years old, 7.1% were above 24 years old and 0.5% were below 10 years old (see Table 1). Figure 1 presents the frequency of the different age categories of the respondents.

Challenges of School Dropouts in Kangeta Division

Ten primary school heads in Kangeta Division gave the following nine reasons for boys' school dropout:

- (1) Working in Khat farms (Mentioned by 80%);

- (2) Easily acquired money from Khat trade (Mentioned by 70%);
- (3) Khat chewing (Mentioned by 50%);
- (4) Khat trade (Mentioned by 50%);
- (5) Loss of parents (Mentioned by 30%);
- (6) Economic hardships (Mentioned by 20%);
- (7) Indiscipline cases (Mentioned by 20%);
- (8) Early marriages (Mentioned by 10%);
- (9) Irresponsible parents (Mentioned by 10%).

Four out of the nine reasons are related to Khat business implying that Khat contributes significantly to boys’ school dropout in Kangeta Division. This finding strengthens the work of Agence (2010) who found that primary school boys provided most labour in Khat producing farms and in marketing the crop. This implies that Khat played a big influence on boys’ school dropout.

Table 1

Age Distribution of the Respondents

| Age categories in years | Frequency | % |
|-------------------------|-----------|-------|
| Below 10 | 1 | 0.5 |
| 10-14 | 22 | 10.5 |
| 15-19 | 111 | 52.9 |
| 20-24 | 61 | 29.0 |
| Above 24 | 15 | 7.1 |
| Total | 210 | 100.0 |

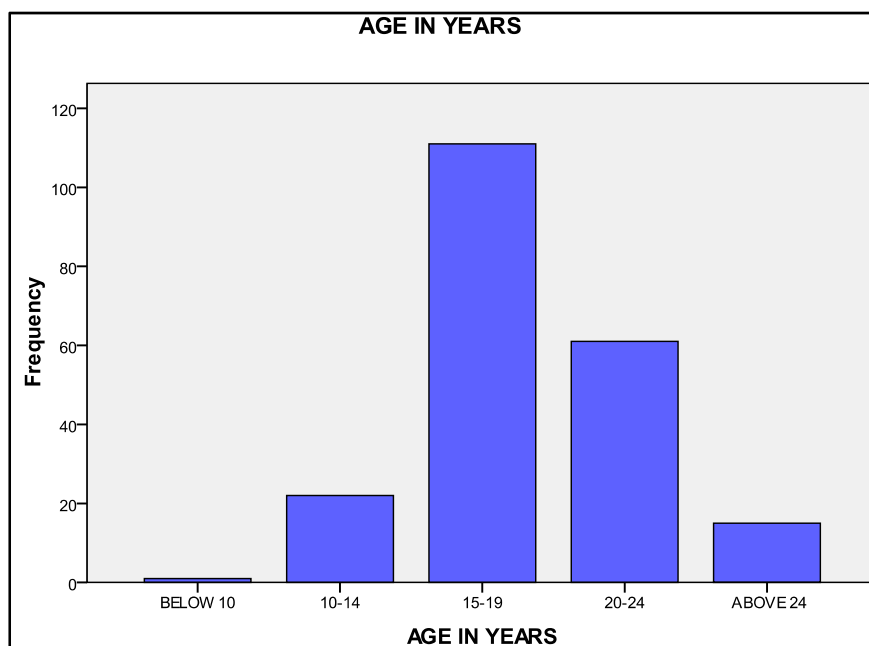


Figure 1. Frequency of the different age categories of the respondents.

Head Teachers’ Perceptions of the Influence of Khat Production, Trade and Chewing on Boys’ School Dropout

Table 2 shows that majority of primary school head teachers in Kangeta Division were of the view that

Khat was highly regarded and socially accepted by residents in the division. The residents accepted Khat despite the fact that it threatened boys' education in the division as indicated by Waweru (2012) who found that school boys worked in Khat farms at the expense of attending school.

Table 2

Perceptions of Head Teachers on the Influence of Khat Production, Trade and Consumption on Boys School Dropout (N = 210)

| Statement | % of the respondents | | | | |
|---|----------------------|----|----|----|----|
| | SA | A | UD | D | SD |
| Khat is highly regarded and socially acceptable | 100 | | | | |
| High poverty levels in the community cause boys to work in Khat farms | 30 | 30 | - | 30 | 10 |
| Quick and ready money in Khat business lures boys out of school | 80 | 20 | | - | - |
| Working in Khat farms influences boys to drop out of school | 60 | 20 | 20 | | |
| Working in Khat business causes boys to drop out of school | 50 | 50 | | | |
| Chewing of Khat is common to all males including primary school boys | 60 | 40 | | | |
| Khat chewing causes low mood to users | 20 | 20 | 50 | 10 | - |
| Khat chewing causes stressful tension among users | 20 | 40 | 40 | - | - |
| Khat chewing causes poor performance of learners in class | 20 | 60 | 10 | 10 | - |
| Boys copy the behaviour of Khat chewing from their peers | 70 | 20 | - | 10 | - |
| Boys copy the behaviour of Khat chewing from their parents | 40 | 50 | 10 | - | - |
| Chewing Khat causes primary school boys to lose interest in school | 70 | 20 | - | 10 | - |
| Khat chewing causes primary school boys to drop out of school | 50 | 20 | 20 | 10 | - |

Notes. SA = Strongly Agree; A = Agree; UD = Undecided; D = Disagree; SD = Strongly Disagree.

Boys' School Dropout Rate, Reasons for Dropping out of School and Age at Which They Started Chewing Khat

The respondents were asked to give reasons why they dropped out of school. About 81% of the boys dropped out of school to work in Khat farms and to engage in Khat trade, 7% left due to peer pressure, 4% due to lack of interest in school, 4% needed money quickly, and 3% as a result of being orphaned, which denied them of basic needs.

Table 3 shows that a statistically significant ($p \leq 0.05$) number of boys dropped out of school to provide labour in Khat farms and to trade in Khat. This finding strengthens the work of Agence (2010) and Wanja (2010) and that of Kinoti (2007) who found that farm labour in Kangeta Division consisted mainly of boys who had dropped out of school.

Table 3

Chi-square Test for the Different Reasons for Dropping out of School

| Reasons | Observed N | Expected N | Residual |
|-----------------------------------|------------|------------|----------|
| Labour in Khat farms and business | 171 | 35.0 | 136.0 |
| Peer influence | 14 | 35.0 | -21.0 |
| Quick money | 9 | 35.0 | -26.0 |
| Orphaned child | 7 | 35.0 | -28.0 |
| Lack of interest of school | 8 | 35.0 | -27.0 |
| Lack of basic needs | 1 | 35.0 | -34.0 |
| Total | 210 | | |

Notes. Chi-square = 636.629, $df = 5$, $p \leq 0.000$.

Table 4 shows that 54.8% of the school dropouts in Kangeta Division started chewing Khat when they were 10-14 years old, 24.8% when they were 15-19 years old, and 19.5% when they were below 10 years old. About 49% of the boys in Kangeta Division dropped from school at the age of 15-19 years, 45.7% at the age of 10-14 years, and 5.2% at the age of below 10 years.

Table 4

Frequency Distribution of Age at Which the Boys Started Chewing Khat and at Which They Left School (N = 210)

| Age category (years) | Started chewing Khat | | Dropped out of school | |
|----------------------|----------------------|-------|-----------------------|-------|
| | N | % | N | % |
| Below 10 | 41 | 19.5 | 11 | 5.2 |
| 10-14 | 115 | 54.8 | 96 | 45.7 |
| 15-19 | 52 | 24.8 | 103 | 49.0 |
| 20-24 | 2 | 1.0 | - | - |
| Total | 210 | 100.0 | 210 | 100.0 |

Class at Which the Boys Started Chewing Khat and at Which They Left School

Table 5 shows that the boys in Kangeta Division started chewing Khat and also left school at a very young age.

Table 5

Class at Which Boys Started Chewing Khat and at Which They Left School

| Class | Started chewing Khat | | Dropped out of school | |
|---------------------|----------------------|-----|-----------------------|-----|
| | N | % | N | % |
| 1 | 9 | 4 | 2 | 1 |
| 2 | 13 | 6 | 9 | 4 |
| 3 | 13 | 6 | 7 | 3 |
| 4 | 42 | 20 | 18 | 9 |
| 5 | 34 | 16 | 22 | 11 |
| 6 | 56 | 27 | 59 | 28 |
| 7 | 35 | 17 | 81 | 39 |
| 8 | 1 | 1 | 12 | 6 |
| Already left school | 7 | 3 | - | - |
| Total | 210 | 100 | 210 | 100 |

How Khat Chewing Causes the Boys to Drop Out of School

Table 6 gives the effects of Khat chewing on boys, which include reduced concentration in class (36.2%), sleeping in class (30%), sleepless nights (14.3%), peer pressure (6.7%), absenteeism (6.2%), poor class performance (5.2%), and lateness in school due to oversleeping (1.4%). This finding strengthens the work of Maithya (2009) and Sternberg (2003) who reported that students who used Khat lost the concentration span, interest in school work leading to absenteeism and eventual dropping out of school. It also supports assertion by Kyalo (2010) that use of Khat affected students' ability to make decision, to think creatively and to develop life and social skills. Other researchers (National Council for Science and Technology, 1996; Wanja, 2010) have also confirmed that Khat chewing exposes young people to peer pressure as they fear to be labeled non-conformists.

Table 6

How Khat Chewing Causes Boys to Drop Out of School

| Effect of Khat chewing in boys | Frequency | % |
|--|-----------|-------|
| Lack of concentration in class | 76 | 36.2 |
| Sleeping in class | 63 | 30.0 |
| Sleepless nights | 30 | 14.3 |
| Peer pressure | 14 | 6.7 |
| Absenteeism | 13 | 6.2 |
| Poor class performance | 11 | 5.2 |
| Lateness in school due to oversleeping | 3 | 1.4 |
| Total | 210 | 100.0 |

Boys Involvement in Khat Trade in Kangeta Division

The school dropouts were asked to explain what they were currently engaged in and the results are indicated in Table 7, which shows that 31.9% of the school dropouts were engaged in Khat trade, 27.6% in Khat picking, 21.9% in Khat preparation and transportation, 6.7% working in kiosks, 4.3% in selling Khat in shops, 3.8% providing manual labour in Khat farms and marketing, 3.3% were hawking Khat in town, and 0.5% were doing nothing.

Table 7

Activities Which School Dropouts Are Currently Engaged in

| Activity | Frequency | % |
|----------------------------------|-----------|-------|
| Selling of Khat in market | 67 | 31.9 |
| Picking of Khat | 58 | 27.6 |
| Khat business | 46 | 21.9 |
| Working in kiosk | 14 | 6.7 |
| Selling in shop | 9 | 4.3 |
| Manual labour in farms or market | 8 | 3.8 |
| Hawking in town | 7 | 3.3 |
| Doing nothing | 1 | 0.5 |
| Total | 210 | 100.0 |

Table 8

Chi-square Test Comparing the Dropouts Activities (N = 210)

| Activity | Observed N | Expected N | Residual |
|-----------------------------------|------------|------------|----------|
| Khat business | 46 | 26.3 | 19.8 |
| Selling of Khat in market | 67 | 26.3 | 40.8 |
| Picking of Khat | 58 | 26.3 | 31.8 |
| Working in kiosk | 14 | 26.3 | -12.3 |
| Selling in shop | 9 | 26.3 | -17.3 |
| Hawking in town | 7 | 26.3 | -19.3 |
| Manual labour in farms and market | 1 | 26.3 | -18.3 |
| Doing nothing | 1 | 26.3 | -25.3 |
| Total | 210 | | |

Notes. Chi-square = 184.667, $df=7$, $p \leq 0.000$.

A chi-square test for the equality of proportions (see Table 8) shows that the number of school dropouts

engaged in selling Khat was statistically significant ($p \leq 0.05$). This is consistent with the Meru North District Strategic Plan 2005-2010, which shows that the District's labour force constitutes 49.7% of the total population and is comprised mainly of school dropouts who engage in Khat small- and micro-enterprises.

Mitigation Measures Suggested by Head Teachers

Table 9 gives mitigation measures ranked first by head teachers in the division. About 30% of the teachers recommended involvement of provincial administration, 20% recommended educating of parents, 20% recommended use of law to stop using boys in Khat labour, 20% recommended the District Education Officer (DEO) to be involved in following up the dropouts, and 10% recommended involvement of stakeholders and local leaders in stopping the use of school boys in Khat farms.

Table 9

Mitigation Measures Ranked as Number One by Head Teachers

| | Frequency | % |
|---|-----------|-------|
| Provincial administration be involved | 3 | 30.0 |
| Parental education on importance of education | 2 | 20.0 |
| Outlaw using of small boys labour | 2 | 20.0 |
| Stakeholders should not use boys | 1 | 10.0 |
| DEO should be involved in following up boys | 2 | 20.0 |
| Total | 10 | 100.0 |

Conclusions

The study concludes that Khat production, trade and chewing are the major economic activities in Kangeta Division. The crop is highly regarded, socially accepted and plays a dominant role in promoting the culture and economy of the Division. However, it has a significant influence on dropout of the primary school boys in the area.

Khat activities were partly responsible for the 9% primary school boys' dropout rate in Kangeta Division. These activities, according to primary schools head teachers, included working in Khat farms, trading in Khat, chewing Khat, and easily obtained money from Khat trade. The researchers also concluded that the boys drop out of school due to peer pressure to participate in the profitable Khat activities. Those who had dropped out and experienced a working life regretted having done so. This was made clear by 62% of them who said if given a chance, they would return to school. The researchers also concluded that most of the money obtained from providing cheap labour on Khat farms (89%) was spent on food rather than on investment such as paying school fees or buying property. The researchers further concluded that Khat chewing which started below 10 years of age led to less concentration by boys in class, more indiscipline and eventual school dropout.

Recommendations of the Study

Based on the findings of the study, the researchers recommend that:

- (1) The provincial administration should team up with parents to ensure that Khat farmers refrain from using school boys as labourers in their farms. They should also ensure that the boys do not engage in Khat trade;
- (2) Leaders and their collaborators and followers should sensitize parents on the importance of education for their children and the dangers of leaving school to engage in Khat trade;
- (3) They should sensitize school dropouts and Khat traders on how to use the income from Khat products

to invest in education;

(4) They should develop a policy that prohibits boys from providing labour in Khat farms and trading in Khat business before they complete school;

(5) Boys should be circumcised after completing class 8 to ensure that most of them remain in school. Circumcising boys before they reach class 8 makes them feel mature enough to be self-reliance and want to drop out of school to engage in Khat trade;

(6) Leaders and education stakeholders in Kangeta Division should ensure that school boys are not used in Khat farms and Khat trade;

(7) Primary school heads in Kangeta Division should strengthen guidance and counselling programmes in their schools to curb Khat chewing by school boys;

(8) Out-of-school youth should be taught at night or when they are free to enable them continue their education.

Recommendation for Further Research

Since guidance and counselling are mentioned as a method of minimizing drug abuse in schools, their effectiveness in reducing Khat chewing by school boys should be investigated carefully.

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