The 'Chat-Chewing Habit' and Its Incidental Interdependence with Alcohol-Drinking Among AAU, Main Campus Male Undergraduate Regular Students

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ABSTRACT: *This study was carried out on a sample of 123 male, A.A.U, main campus regular undergraduate students in the academic year 2000/01. The main questions of this study are related to the prevalence of chat, alcohol and their combined use, both in frequency and extent of use, among the student population under study.*

The instrument and procedures used in this specific study is based on that first developed by Allene Tessema (1992) with modification. The researcher applied different statistics such as: ANOVA, percentage, Pearson's product moment correlation, chi-square (X^2), Scheffe's method of multiple comparisons, Cramer's phi (Ø) and Index of Predictive Association Statistics in analyzing the data.

The researcher found that 43 percent of the total participants or 89.77 percent of the chat users joined the University with chat use habit. These students are also found to be heavy users of chat. The study further shows that 60 percent of the total participants were users of chat, while 46.7 percent of them were alcohol users. Of all the participants, 30 percent were combined users. What is interesting is that 75 percent of the total chat users and 71.43 percent of the total alcohol users were found to be heavy users.

In analyzing the relations between chat and alcohol use to the background variables, religion is found to be associated with chat and alcohol use, both in frequency and extent of use.

In relation to chat and alcohol use interdependence, half of the total chat users are found to be users of alcohol. There was also a significant correlation ($r = 0.47$) between participants' attitude towards chat and alcohol use.

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INTRODUCTION

A number of articles, journalistic accounts, scientific papers and reports are full of evidences on the prevalence and interdependence of drug use. Perhaps, the same sources apply to chat and alcohol habituation among the younger generation. Moreover, in universities, colleges and in some secondary schools such habits seem very sensitive problems within which to pursue a general interest in students' social interaction, a specific interest in the interrelation of students' attitude and behavior, and a certain concern with the way in which the student community apply or fail to apply what they have read of or heard about the consequences of such habits.

In most cases, the way in which knowledge and feeling interact is a determinant of decision, eventually of behavior. As such, the habits of chat chewing and drinking alcohol seem appropriate areas within which to explore the apparent discrepancy between knowledge and behavior among the student population of Addis Ababa University, main campus. On this, except for a tiny minority of skeptics, scientists have arrived at a consensus that both chat chewing and alcohol taking are harmful and part of drug abuse. And yet many students carry a bundle of chat, especially during mid-semester or final examination periods, day after day. Many others visit bars or other places to enjoy a bottle of beer, a glass of liquor, or a can of 'tella'--the locally brewed beer. Of all, some students proceed from chat chewing, most of the time accompanied with cigarette smoking, to alcohol taking then to the more disgraceful act--unsafe sex. But it is not necessary (not a must) to develop such behaviors in the campus. As such, the habits of chat

chewing and/or alcohol taking could be a before or after campus phenomena for such students.

Unfortunately, the mentioned problems among university students seem male-sex-oriented behavior though it is difficult to discover all of the reasons for the phenomena in question. To illustrate some of the many possible reasons, a number of researches revealed that some students imitate these habits and conform with their friends. These students also use chat and/or alcohol as a *medicine for depressions, as a way to pass over confused perceptions, as a means of tension reduction (as tranquilizer), a support for defensive reactions, as a way to break psychological barriers, as a means to socialize (to increase popularity), as recreational stimulant and an aid to promote alertness during long hours of studying, especially during mid-or final semester examination periods.* Due to such beliefs and other factors, these students intentionally forget (repress) what they know about the diverse consequences of such habits. As such, the apparent discrepancy between their knowledge and behavior becomes clear for observers. Although the problem in question (i.e., 'why do university students develop such habits?') is a crucial research question, it seems a neglected topic in Addis Ababa University. In fact, some researchers have (Amha Mekasha 1984, Zein Ahmed Zein 1984, Allene Tessema 1992, Seyum Gebreselassie and Ayalew Gebre 1996) arrived at a consensus that the prevalence of chat chewing among the student population is high. Polydrug abuse was also reported and that chat, tobacco and alcohol were considered as the most common combinations.

As its geographical coverage became very large, chat is found across different ethno-linguistic groups. As such, it adapts different local names. To mention some: gat, Khat, Qat (in Arabia); chat (Amharigna) and chati, Jimmae (Oromigna), (both in Ethiopia); Jaat, Qaad, Qaat, Qat (in Somalia); Bushmen's tea (in South Africa); Kaat tea (in East Africa); and Abyssinian, Arabian or Somalia tea. The most common name is its Arabic name 'Khat'. In Ethiopia, the Amharic name 'chat' is common (Sebsebe 1984:8).

A prohibition of chat use is not a recent phenomenon. According to Van Donzel et al. (cited in Distefano 1983:10-11) there was a chat-use caution in 1550 in Yemen. At that time, Ibn-Hadjar al Hythami (d: 1567) wrote a reply to the question 'whether chat use is permitted to Muslims'. He argued that "its use fell into the category of Shubuhat [resemble as permitted or not] from which one should refrain." Since that time there were a number of controls and bans on the cultivation and use of chat. But in such prohibitions of chat use, there were some recommendations. As such, Andargatchew (1988:334) correctly quotes kalix and Braendon, who wrote in 1985,

> *It has been found, however, that prohibition of chat is difficult to enforce and has little effects. More gradual approaches such as reducing the availability of chat by restricting the marketing of the leaves may have better chance of success.... Of course, such regulatory measures should be supported by crop substitution programs for those who derive their income from chat, and by creating alternative recreational activities (p.162).*

It is not uncommon to use chat among university, college and high school students. Since the early eighties many Ethiopian educators' noted the growing number of students' who chew chat. The students think that it helps

them to stimulate and remain awake in the process of studying (Amare and Krikorian 1973:374). These students use chat while preparing for important examinations as it is believed to sharpen the mind and the senses (Seyoum and Ayalew Gebre 1996:56). This fact is true in AAU, main campus, but it is not typical only to Ethiopian students. In 1973, Hughes (Cited in Distefano 1983:6) reported that among Yemeni students, chat use has been found to increase at examination time to promote alertness during long hours of studying. It is not also uncommon, among some university students, to substitute a packet of tea powder or other drug types when the access to chat becomes difficult. Most of the time, it is due to the sky-shooting price of chat and the bitter control of the campus police. To be specific, it is safe to say that chat chewing in Ethiopia, "cuts through many faiths, social levels and age groups" (Amare and Krikorian 1973:370).

The reason for chat chewing may differ across time periods, levels of civilization, age-sex structure, degree of chat use, occupations, etc. In many cultures, chat may play a critical role as recreational stimulant, aid to work and religious practices, appetite suppressant, a source of nutrition and as a general medicine (Distefano 1983:5). Seyoum and Ayalew Gebre associated these reasons directly with the situation of the chat-chewer. As such poverty, ignorance, lack of organized sports and recreational programmes and facilities, joblessness and despair seem to be the main causes of the problem.

The medical effects of the use of chat were studied in many countries. Such recent researches proved the effects of chat on people who use it habitually.

Thus, it is easy to understand the reasons raised by chat chewers are more of unscientific. Many people who chew chat might have knowledge about the effects of chat use. But they use it to remain awake in the process of studying, for example. It shows discrepancy between their knowledge and behavior. As such, the researchers tried to measure their attitude towards chat use and incidence of chat use. This also holds true for alcohol use.

Alcohol

Man's enjoyment of alcohol is ancient, whereas its discoverer is unknown. Even the substance from which the first alcohol originated is not historically recorded, but most likely grape, grain or honey served as the forerunners (Chafetz and Demone 1962:4).

In the twentieth century, alcoholism has become a problem of the rich and the developed countries. It is difficult to discover all of the reasons for the phenomena in question. However, a very interesting fact, from psychological point of view, is that "men become less satisfied with the betterment of their life," as complained by an American psychologist. Research by the Russian psychiatrist, Hodakov (cited in 'Alija' Ali 1984:63) showed a frightful expansion of alcoholism, especially in these countries, after the Second World War, like the prevalence of chat use in Ethiopia and other countries. According to this research report "the sale of alcohol worldwide doubled from 1940 to 1960. In 1965, it was 2.8 times higher; in 1970, 4.3 times; and in 1973, 5.5 times." According to him, a specific phenomenon is the expansion of alcoholism among women young people. However, at least among female university students, this is not our case.

In our country, prohibition efforts have not yet been practiced publicly. No steps are being taken to minimize the excessive consumption of alcohol. To date, there are no statistics to show the extent of the problem (Andargachew 1988:355). In general, it seemed a neglected topic. Children's and Youth Affairs Organization (1995:36) clearly stated this fact as follows:

> *In Ethiopia, there is no legislation controlling the distribution and use of alcohol or that defines the minimum age at which minors may legally have access to alcoholic beverages. There are also no public health policies and programs for the reduction of alcohol related problems. The penal code does not prohibit a minor from having access to alcohol by defining an age limit but it prohibits the sale of alcohol to a minor. Not-withstanding the presence of such legal provisions, adolescence have no problem of access to alcohol.*

Many societies that have realized the ill effects of alcohol have tried to suppress or prohibit its use through different mechanisms. The emphasis, nowadays, in Western societies, is not so much on abstention from alcohol as on the early recognition of its dangers. A recent suggestion has been recognized that people will drink and that perhaps the best course would be to educate children early as to the dangers of uncontrolled drinking (Willis 1973:77).

For Muslim community, however, complete abstinence from alcohol is the beginning and the end. Islam stands out for its uncompromising stand against alcohol. There can be no compromise with evil and alcohol is evil--"Devil in the Bottle". 1400 years ago Islam declared a total war against alcohol (al-Qur'an 5: 90-91). Perhaps, it was a very successful revolution. Its

effect, without any change, is still there especially among Muslims. Even now, all Muslims consider alcohol as the strongest weapon in the hands of Satan and the ruling class to keep the people "doped, unthinking and in the condition of perpetual slavery." It is a vicious idol; it traps, ensnares and enslaves. It is just another form of slavery. Alcohol is the most subtle and most dangerous force, which erodes and destroys a nation. SH. Bahar (1996:81-82), translator, clearly describes this:

> *It is quite right to say that the alcoholic drink is one of the major causes which have annihilated the independence, freedom, natural wealth and resources of the nations, because it diminishes the mental power and the sense of understanding of the addicted people who are led to sell their precious resources and their national and spiritual wealth and honor to a cup of wine.*

In summarizing the Muslims' belief on alcohol, it is possible to say that as experience proves true, the only way an individual can conquer his/her problem is total abstinence.

For some scholars alcoholism is a "Selectively" addicting drug, meaning that not everybody who drinks will become addicted to it (Mueller and Ketcham 1987:17). In other words, alcohol temporarily incapacitates many users and "some" eventually become addicted (Andargachew 1988:336). But, who are "some"? On this Chaftez and Demone (1962:193) reported that the drinking of the pre-alcoholic is already different from that of his associates (alcoholics). Furthermore, some alcoholics show a pathological drinking behavior almost from their first drink and at a very early age. As such, it is not the quantity that determines addiction. From all these, it

would not be true to state that alcohol abuse leads inevitably to alcohol dependence (alcoholic behavior), but more important, nobody other than the alcohol user has ever become dependent on alcohol. As it is the reality, the consequences of alcoholism are not distinctly different from pre-alcoholism (alcohol use).

Interdependence between Chat and Alcohol Use (Combined use)

People, for one or another reason, use drug. They may enjoy one type, perhaps through time will add another. It may be to efface, to increase or to substitute the effects of the previously used drug type. The previously used drug type may also create other bodily or psychological need, which can be gained or temporarily enjoyed through other drug types. Through such and other processes an individual develops combined or multiple drug use. The effects of such a behavior clearly stated by the United Nations and Drug Abuse Control (1987:18) as follows:

> *All narcotics are dangerous and have serious physical and psychological consequences. However, when different drugs are used in combination with each other, with other substances such as alcohol or administered immediately following ingestion of another narcotic, the consequences are far more dangerous. Addiction often occurs in a shorter period of time and it is difficult to anticipate what the effect on the individual will be.*

According to Amare and Krikorian (1973:372), *chat produces thirst, and thus liquid, mainly water, is drunk.* Is it the reason to take alcohol after chewing a bundle of chat? As chat is a mild stimulant drug, a depressant type of drug (alcohol, for example) may also be necessary. It is not only a

plain fact. But it is clearly revealed in a number of researches, throughout Ethiopia, that emphasize the combined nature of chat and alcohol use.

In December 1983, Zein Ahmed Zein conducted a research on the then Gonder university students. His aim was to provide insight into drug use among university students with particular reference to chat. In his study, alcohol, cigarette and chat were used singly or in combination among Gonder students. Double combination of drugs was also frequent. And the combined use of chat and alcohol was next to the multiple uses of chat, alcohol and cigarette. Like psychotropic agents, alcohol was widely used by Gonder students to counteract the stimulation of chat.

Amha Mekasha (1984:77-82) conducted a research on participants who were voluntarily admitted and experienced chat chewing for more than one year. In his study, nearly 90 percent need alcohol to efface the effects of chat at the end of chewing, unless engaged in a certain assignment.

Moreover, Seyoum Gebre Selassie and Ayalew Gebre conducted a study on drug and substance abuse at Addis Ababa and in 24 towns across Ethiopia, from June to November 1995. In this study, some of the respondents reported that chat chewing often led to the abuse of illicit substances. Polydrug abuse, involving the abuse of two or more substances in combination with one another, was widely reported by respondents in the study; the most common combinations were chat, tobacco and alcohol.

All these researchers reached a consensus that combined use of chat and alcohol is not uncommon. Perhaps, these studies consist of different age group, socioeconomic status, culture areas, climatic regions, assess (for chat

and/or alcohol) areas, occupation groups and both sex groups. From this, it is possible to say that incidental interdependence between alcohol and chat use (combined use) is common for different socio-cultural and economic groups of people.

METHODOLOGY

The population, in this specific study, constitutes 2464 second, third and fourth year male A.A.U., main campus regular undergraduate students who are enrolled in the academic year 2000/01. The study was carried out on a sample of 123 participants. It accounts only for 5 percent of the total population. But, it is not too small to generalize the results of the sample to the population. Because, it is in *line with that of Jonston's (1989) required sample of drug use research* as praised by Allene Tessema (1992). A sample of 41 students was selected by stratified random sampling technique, taking each educational level (Years of study) as a stratum.

The instrument used in this specific study is based on that first developed by Allene Tessema (1992). Allene has constructed chat use research tools, which are designed to measure the extent, attitude and reasons for students' chat use. He further approved the validity and reliability of the tools and organized them in Ethiopian context. The researcher applied all those research tools, with minor modifications and added alcohol on the scales. The questionnaire used consists of personal background information (age, years, religion, major/department and place of chat chewing habit formation); the Student Chat and Alcohol use scale (4 items for each); Students' Chat use Attitude scale (24 items) and Students' Alcohol use scale

(24 items) following the 5-point scale techniques; and Ranking students chat/alcohol use Results (5 items for both).

In this specific study 123 questionnaires were distributed. All participants sent back the questionnaires beneath the researcher's dormitory door. This is so because, confidentiality on the participants' response was necessary. In addition, the students' movement, during the study period, was a problem to gather students and distribute a questionnaire. Nevertheless, the return rate was found to be 100 percent. But, the response rate was found to be 97.6%.

The procedure used in data analyses of this specific study was similar with that of Allene's recommendation to use the self-report questionnaire. But, the study of the place where students developed chat-chewing habit and the association between students' attitude towards chat use and alcohol taking (combined use) were added phenomena for this specific study. As such, the former analyzed by percentage and the later by Pearson's product moment correlation, as the attitude scores analyzed by ANOVA and the association of chat and alcohol use to the background variables by chi-square (X^2) statistical tests. The researcher also applied Cramer's phi (Ø) and Index of Predictive Association Statistics to check the strength of association between chat/alcohol use and the three selected background variables. Furthermore, Scheffe's method of multiple comparisons was helpful in calculating the students' attitude towards chat/alcohol use.

In the study, the term Non-users of chat/alcohol refers to individuals who score 4 or 5 in the students' chat/alcohol-use scale. Those who scored 6, 7, or 8 are also considered to be Light-users of chat/alcohol ('Occasional users

of chat/alcohol.') Finally, Heavy-users of chat/alcohol are those who scored from 9 to 19 in the students' chat/alcohol-use scale. But, it is not essentially to say that the individual is highly intoxicated and dependent on chat/alcohol or he is an Alcoholic. Because alcoholism seemed to be the last stage and the rare case of alcohol use (Chafetz and Demone 1962).

DATA ANALYSIS/ RESULTS

Where did students develop the habit of chat–chewing?

This question is crucially important to discuss the prevalence of chat and alcohol use among the student population. This is so because habitual chat chewing seemed to be "inertia" to the usage of potential drugs. Since students came from different socio-economic, cultural and religious groups, chat chewing also seemed a before or after campus experience. This being so the designated students were asked the above question and the following result (See Table 1) was gained.

Table 1: Place where Students Developed Chat-Chewing Habit (percentage)

PLACE	EXTENT OF CHAT-USE					FREQUENCY OF CHAT-USE					
	YEAR			TOTAL		HEAVY USERS		LIGHT USER		NON USERS	
	II	III	IV	No.	% out of total users	No.	% out of total users	No.	% out of total users	No.	% out of total participant
Before Campus	20	13	18	51	89.77	46	65.71	6	8.57	--	--
In Campus	2	4	-	6	10.30	6	8.57	-	-	--	--
Never Used Omitted	19	22	16	57	-		-	8	11.43	48	40
Answers*	2	2	2	6	-		-	4	5.71	2	1.67
Total	43	41	36	120	100.00	52	74.28	18	25.71	50	41.67

* The who did not respond only on this specific part of the study.

As described in Table 1 above, 51(43.3%) participants reported that they developed the habit of chat chewing before joining the campus. Only 6(5.0%) participants replied that it was in the campus. In line with the participants' educational level, a little higher number of second year students admitted as they came to the university with the habit of chat-chewing, followed by fourth year students. The number of third year students who confessed as non-users of chat were also a little higher than year II and IV students. On the contrary, there was no fourth year student who acknowledges that he developed the habit here in the campus. Equal number of students, from all educational levels did not respond on the above question. In general, out of the total participants who replied that they used chat, only 10.3 percent developed the habit in the campus. Whereas, 51(89.7%) of them came to the University with the habit of chat chewing, as the participants themselves complained.

The participants' present chat-use experience, however, followed the trend of their response to the above question. 46 (38.33%) of the participants who admitted that they developed the habit before campus were found to be heavy users of chat. While only 6 (5%) of them were light users of chat. All participants who acknowledged that they developed the habit in the campus were also found to be heavy users of chat.

The Prevalence of Chat and/or Alcohol Use

The Extent of chat and/or Alcohol use Incidence

The prevalence of chat and/or alcohol use seemed high and increasing in an alarming rate. So, it was important to answer the question 'how wide spread is chat and/or alcohol use among the designated participants?' In this Specific study, 72 (60%) of the total participants were found to be users of chat, while 48 (40%) of them were non-users of chat. But this figure is not similar with what the participants themselves have acknowledged about their experience of chat use above. This shows that there were participants who considered themselves as non-users of chat even if they use chat occasionally, as described in their total score on student chat-use scale.

Furthermore, 56(46.7%) participants were found to be alcohol users, while 65(53.3%) were non-users of alcohol. Of all, 36(30.0%) participants were found to be users of both chat and alcohol. This means 50.0 percent of the total 72 chat users were users of alcohol in different level (frequency). In other words, one in every two participants, who acknowledged their chat-use habit, had tasted alcohol and was occasional alcohol users, at least.

The Prevalence of chat and Alcohol Use by User Type (Frequency of use)

All users of any drug type are not similar in taking that particular drug--some use occasionally, others frequently. The reasons may be different and many in number, but this condition also happened among chat and/or alcohol users.

Table 2: Chat and Alcohol Users Distribution by User Type

TYPE OF DRUG	USERS TYPE								
	HEAVY USERS			LIGHT USERS			TOTAL USERS	NON USERS	
	No	% out of total participants	% out of total users	No	% out of total participants	% out of total users	% out of total participants	No	% out of total participants
Chat	54	45	75	18	15	25	60	48	40
Alcohol	41	33.33	71.43	15	13.33	46.67	46.67	64	53.33

In this study (refer Table 2), 45 percent of the total participants or 75 percent of the total users of chat were found to be heavy users of chat, while only 15 percent of the participants were light users of chat. Almost one out of every three participants was found to be heavy user of alcohol, while only two of the 15 participants were light users of alcohol. However, one in every two participants was found to be non-user of alcohol.

Association of Chat and Alcohol Use to the Participants Background Variables

The use of any type of drug may vary along with the users different personal background variables. Some drugs prefer some personal characteristics of the users, others do not reveal among different religious groups, educational levels, and age groups, for example. Likewise, chat and alcohol use seemed different among different religious groups, educational levels and age groups as revealed on the participants' response. The following are the results of the analyses of association between alcohol/chat use and the three selected background variables-Religion, Age, and Years of Study.

Chat and Alcohol use by Religion

Table 3: Chat and Alcohol users and their level of use Distribution by Religion (Percentage)

	CHAT USE (Level of Use)						ALCOHOL USE (Level of Use)					
	Heavy Users		Light Users		Total Users	Non Users	Heavy Users		Light Users		Total Users	Non Users
RELIGION	% of total participant.	% of total users.	% of total participant.	% of total users	% of total users	% of total participant.	% of total participant.	% of total users	% of total participant.	% of total users	% of total users	% of total participant.
Islam	26.6	44.4	10	16.6	61.1	15	5	10.7	6.67	14.3	25	40
Christian*	18.33	30.56	5	8.33	38.9	25	28.33	60.72	6.67	14.3	75	13.33
Total	45.00	75.00	15	25.00	100.0	40	33.33	71.43	13.34	28.6	100	53.33

* All Christians with out specification

The distribution of chat and alcohol use between the Muslims and Christians shows a difference (see Table 3). It is observed that 32 (26.61% of the total) Muslim participants were found to be heavy users of chat, 12 (10%) of them were light users and the rest 19 (15 %) were non-users of chat, while only 6(5% of the total) Christians were light users, 22(18.33%) of them were heavy users of chat and 30(25%) of them were non-users of chat. On the contrary, 34(28.33% of the total) Christian participants were found to be heavy users of alcohol, 8(6.67%) of them were light users of alcohol and 17 (13.33%) of them were non-users of alcohol, while only 6(5% of the total) Muslim participants were found to be heavy users of alcohol, 8 (6.67%) of them were light users of alcohol and 48 (40%) of them were non-users of alcohol.

In general, in spite of the prevalence and frequency of chat use, 44.44 percent and 30.56 percent of the total users were Muslims and Christians who chew chat frequently (i.e., heavy users of chat), respectively. This means, out of the total 72 chat users 61.1 percent were Muslims and the rest 38.9 percent were Christians. Out of the total 56 alcohol users, Christians accounted 75 percent while Muslims were only 25 percent. From the total 120 participants 44 (36.67%) Muslims were chat users and only 14(11.67%) of them were alcohol users, while only 28 (23.33%) Christians were chat users and 42(35%) of them were alcohol users. This specific study roughly shows that "chat chewing preferred Islamic religion while alcohol use preferred Christianity."

Table 4: Relationship between the Extent and Frequency of Chat/Alcohol use and Religion

	CHAT USE				ALCOHOL USE			
FREQUENCY OF USE	Heavy Users	Light Users	Total Users	Non Users	Heavy Users	Light Users	Total Users	Non Users
RELIGION	No	No	No	No	No	No	NO	No
Islam	31	12	44	18	6	8	14	48
Christianity	22	6	28	30	34	8	42	15
Total	53	18	72	48	40	16	56	63
Chi-square value	X^2=0.312,Df = 1 X^2(1,0.05)=3.841		X^2=6.43,Df = 1 X^2(1,0.05)=3.841		X^2=7.46,Df = 1 X^2(1,0.05)=3.841		X^2=29.886,Df = 1 X^2(1,0.05)=3.841	

In order to examine group differences on the extent and frequency of chat/alcohol use and religion, a series of X^2 (Chi-square) analyses were performed (Table 4). Examination of the results on the extent of chat use revealed significant group differences, X^2 (1df) = 6.43, $p<0.05$. The extent of alcohol use X^2 (1df) = 29.89, $p<0.05$, and the frequency of alcohol use, X^2 (1df) = 7.46, $p<0.05$, also revealed significant group difference. But, there was no significant group difference on the frequency of chat use among the religious groups. However, the Chi-square analyses did not show which of the religious group has been significantly associated to chat/alcohol use. To verify this standardized residuals were computed for all significant Chi-square scores in each category.

Table 5: Standardized Residuals* For Chat and Alcohol Use and Religion

	CHAT USE			ALCOHOL USE		
		Muslims	Christians	Muslims	Christians	
F_3	Heavy users	-	-	-1.266	0.730	
	Light users	-	-	2.000	-1.156	F_4
E_3	Users	1.115	-1.153	-2.776	2.869	E_4
	Non-users	-1.365	1.412	2.596	- 2.685	

* Decision Rule: $|R| \geq 2.00$ is a major contributor to the significant Chi-square (X^2) value; Where $R = {}^{O-E}/_{E}$

From Table 5 above, the present finding implied that the prevalence of both chat and alcohol use and the frequency of alcohol use are associated to religion. However, the frequency and extent of alcohol use was highly associated to Christianity as chat use was to Islam. Since it is useful to know the strength of association in addition to the significance of differences two measures of association were also computed. The first was 'Cramer's phi (Ø)' and the second was 'the Index of Predictive Association' (see Table 6 below).

Table 6: Measures of the Strength of Association For all Chi-square Significant Analyses

	Variable A		
	CHAT	ALCOHOL	
Variable B	Users V_s Non users(E5)	Users V_s Non users(E6)	Heavy V_s Light users (F5)
Islam	$Ø_1 = 0.231$	$Ø2 = 0.499$	$Ø = 0.365$
Christianity	$\lambda_{A1} = 0.21$	$\lambda_{A2} = 0.48$	$\lambda_{A3} = 0$
	$\lambda_{B1} = 0.04$	$\lambda_{B2} = 0.46$	$\lambda_{B3} = 0.125$

Chat and Alcohol Use by Age

Since it is a variable, the prevalence and level of use of chat and alcohol may vary among the different age groups. Although 6(5%) of the 120 were omitted answers, in this specific study, 30(25%) participants in 19-21 age group, 11(10%) in 22-24, 6(5%) in 25-27, and 2(1.67%) in 28-30 age groups were found to be heavy users of chat, while only 4(3.33%), 8(6.67), 4(3.33) and 2(1.67%) were light users of chat, respectively. The rest 15 (13.33%) in 19-21 age group, 26(21.67%) in 22-24, and 2(1.67%) in each of 25-27 and 28-30 age groups were non-users of chat. Of the total 68 chat users age group, 19-21 accounted 50%, age group 22-24 accounted 29.41%. 4.71% were age group 25-27 and the rest 5.88 percent were in the age group of 28-30.

In the case of frequency and prevalence of alcohol use 14(11.67) participants in 19-21 age group, 12(10%) and 5(10.7%) from each of 25-27 and 28-30 age groups were found to be heavy users of alcohol, while only 8(6.67%) in each of 19-21 and 22-24 age groups were light users of alcohol. 28 (23.33%) in the age group 19-21, 26(21.67%) in the age group 22-24 and 6(5%) in 25-27 age group were non-users of alcohol. Of the total 54 alcohol users age group 19-21, here also accounted the highest proportion (i.e., 40.74%), age group 22-23 accounted 37.04 percent and each of age groups 25-27 and 28-30 accounted only 11.11 percent.

Here, it is important to note that participants in age group 19-21 accounted 41.67 percent of the total 120 participants. This being so, their proportion in both chat and alcohol use was found to be high in the above calculation.

The calculated chi-square X^2 (3df) = 9.38, shows a clear difference in the prevalence of chat use among age groups. But, in the calculation of standardized residuals for chat use and age, no cell was revealed as a contributor to the significance difference to the significant chi-square value above. To know the strength of association, Cramer's phi (Ø) and the Index of Predictive Association were also computed. The calculated Cramer's phi,(Ø=0.29), presented a lowered strength of the association between chat use prevalence and age groups. The calculated Index of Prediction for the student's chat use habit (λ =0.156) said that knowing whether or not a student used chat reduces our errors of prediction of the age group of the student by 15.6 percent compared to no knowledge of student's chat use habit. The other value (the prediction of a students age groups, i.e., λ =0.130) strengthen this fact when it said knowing whether or not a students age group category, we will make only 13.0 percent fewer errors in predicting the students chat use habit.

Attitude towards Chat and Alcohol by Level of Usage

To obtain a significant conclusion on the significant differences between the attitudes of heavy, light and non users regarding chat/alcohol and chat/alcohol use, the researcher has compared raw means, computed one-way ANOVA to check the significance of the differences and performed Scheffe's method of multiple comparison.

Over all Attitudinal Differences of Users

Table 7: No of participants in chat/alcohol use frequency groups and their Associated Means For the over-all Student Chat/Alcohol use Attitude

USER TYPE	HEAVY USERS	LIGHT USERS	NON USERS
CHAT USE: No. of participants	54	18	48
Mean Scores	70.04	55.56	49.29
ALCOHOL USE: No. of participants	40	15	64
Mean Scores	61.4	50.19	47.84

In their raw and crude form the calculated means, in Table 7 above indicated a clear attitudinal difference among each group for the overall student chat and alcohol use. Here, it is possible to observe the discrepancy between knowledge and behavior among the student population. Because, even heavy users of chat and alcohol have scored lower mean (almost half of the absolute 120 mean score) on the attitude scales. In both chat and alcohol use the means decreased from heavy users group to the non-users. This means, heavy users have better attitude towards chat or alcohol, followed by light users. But, such a comparison is not free from deception. It may lead the researcher to weak conclusion. For this reason the F statistic of the ANOVA has been computed for further significant explanation of the differences.

The calculated ANOVA analysis, $F(2,117) = 35.896$, $P<0.05$, shows that the overall attitude mean differences among the three groups of chat users were statistically significant. This means that the calculated mean scores for

the three groups were not equal. Because the result obtained from the F test of ANOVA vividly expressed the significant chat use attitudinal differences among the different user types. From this, it is possible to conclude that the three groups of chat users significantly differ in their attitude towards chat and chat use. But, to make this conclusion truer, it is essential to know which means or pair of means differ significantly. Thus, the researcher has employed Scheffe's method of multiple comparisons. S often abbreviates it.

Table 8: Comparison ratios for students' chat-use Attitude

Groups	Heavy users	Light users	Non users
Heavy users	-	-	-
Light users	4.22	-	-
Non users	8.27	1.80	-

(S=2.48) (Decision Rule: If CR ≥ S rejects H_0)

The calculated comparison of means among the different groups of chat users attitude, see Table 8 above, shows that the contrasted means between both heavy users Vs light users and heavy users Vs nonusers were significantly different on the overall attitudes of chat use although heavy users Vs nonusers category was highly significant. However, non-significant difference pertained to the light users Vs non users group. This means, light users and nonusers of chat are related to each other in their attitudes towards chat and chat use than heavy users to others.

There was also a significant attitudinal difference, $F(2,117)=23.19$, $P<0.05$, among the three groups of alcohol users towards alcohol and alcohol use. To understand the means or pair of means which are significantly different

in their attitude towards alcohol and alcohol use, the researcher has computed Scheffe's method of multiple comparisons and depicted in Table 10 below.

Table 9: Comparison ratios for Students' alcohol use Attitude

Groups	Heavy users	Light users	Non-users
Heavy users	-		
Light users	3.77	-	
Non-users	6.71	0.84	-

(S=2.48)

Table 9 shows the result of comparison of means. The results implied that heavy users Vs light users and heavy users Vs non-users were less related to each other in their attitude towards alcohol and alcohol use than light users Vs non-users group. This is so because there is no significant difference between non-users and light users of alcohol.

The significant difference between the overall attitudes of heavy, light and non chat/alcohol users regarding chat/alcohol and chat/alcohol use was presented in the above statistical analyses. But, the three groups may also differ in their response for positive and negative statements. This is so because some students may have negative attitude towards chat/alcohol and chat/alcohol use, even if they use chat/alcohol frequently. Thus, the participants' attitude in the positive and negative statements of chat/alcohol and chat/alcohol use has been studied and presented in the following manner.

Attitudinal Differences in the positive statements

Table 10: Attitudinal Differences among the Three groups in positive sub–scale scores

User Type:	Heavy users	Light users	Non-users
CHAT USE: No. of participants	54	18	48
Mean scores	34.96	27.78	22.33
ALCOHOL USE: No. of participants	40	16	64
Mean Scores	29.05	22	21.39

As described in Table 10, the mean scores increase with the increment in the frequency of chat and alcohol use. As such, heavy users scored a higher mean in the positive sub-scale scores than others.

The calculated univariant tests (ANOVAs), $F(2,117) = 34.20$, $p < 0.05$ and $F(2,117) = 23.55$, $p < 0.05$, also show a statistically significant attitudinal difference, in the positive attitude sub-scale scores, among the three groups of chat and alcohol users, respectively. The means or pair of means, which differ significantly in the analyses, were also computed for further explanation.

Table 11: Comparison ratios For the Positive Attitude Sub-Scale Scores

Groups	Heavy users	Light users	Non – users
CHAT USE:* Heavy users	-		
Light users	3.40	-	
Non –users	8.20	2.55	-
ALCOHOL USE:** Heavy users	-		
Light users	4.196	-	
Non –users	6.719	0.38	-

(* & ** S = 2.48)

In the case of positive attitude towards chat use, Table 11 above shows a significant difference among the means of the three groups of chat users. There is, however, a strong similarity between light and non-users of alcohol in their means for positive attitude sub-scale scores.

Group Differences in Negative Chat and Alcohol use Attitude Sub-scale

Although some people attribute many positive effects and properties to the use of chat and alcohol, there are also people who attribute a number of devilish effects and properties to their use. This being so the researcher has analyzed the negative attitude sub-scale scores for the three chat and alcohol user types.

Table 12 : Attitudinal Differences in the Negative Sub-scale Scores among the Three Groups

Groups	Heavy users	Light users	Non – users
CHAT USE: No. of participants	54	18	48
Mean Scores	35.44	27.78	26.96
ALCOHOL USE: No. of participants	41	15	64
Mean Scores	32.35	28.56	26.45

Table 12 indicates the attitudinal differences in the negative sub-scale scores in both chat and alcohol use among the three groups. Similar to the positive sub-scale scores case, heavy users ranked first in the negative sub-scale scores mean attitudinal differences. This means that both heavy users of chat and alcohol disagreed on the negative statements; where as light and non-users of alcohol responded positively. This shows that non-and light users of alcohol presented their negative attitude towards chat than heavy users. However, a critical observation on the mean scores of alcohol users showed a relatively similar and more of negative attitude towards alcohol and alcohol use among the three groups. To make this fact vivid the researcher further computed the F test of ANOVA statistics.

The calculated univariant tests (ANOVAs); $F(2,117) = 19.32$, $p < 0.05$ and $F(2,117) = 8.495$, $p < 0.05$, show statistically significant attitudinal difference, in the negative sub-scale scores among the groups of chat and alcohol users, respectively. So, it is empirical to conclude that the three groups of chat/alcohol users were significantly different in their attitude towards chat/alcohol and chat/alcohol use. The researcher further computed

Scheffe's multiple comparisons to know the mean or pair of means, which differ significantly.

Table 13: Comparison ratios For the Negative Attitude Sub-Scale Scores

Groups	Heavy users	Light users	Non – users
CHAT USE:* Heavy users	-		
Light users	3.85	-	
Non –users	4.02	0.41	-
ALCOHOL USE:** Heavy users	-		
Light users	1.80	-	
Non –users	4.13	1.07	-

(* & ** S=2.48)

As described in Table 13 there was no significant difference between the means of light and non-users of chat on the negative attitude sub-scale scores. But, there was a clear difference between heavy V_s light and heavy V_s non-users of chat on the mean scores. Contrary to this, there was a clear difference only on the mean scores of heavy V_s non-users of alcohol. But there was a non-significant difference on the mean scores of heavy V_s light and light V_s non-users of alcohol. This means, there was no clear attitudinal difference on the three groups of alcohol users.

Interdependence Between Student's Attitude Towards Chat chewing and Alcohol Taking (Combined Use)

The habitual use of any type of drug may lead to the usage of other drugs. As chat and alcohol are considered a drugs, they seemed "inertia" for the usage of potential drugs. But, the usage of two or more drugs does not imply that the use of drug X caused the use of drug Y, or that the use of drug Y caused the use of drug X. For this reason, the researcher studied the

combined use of chat and alcohol, not considering one as inertia to the other. As such, the researcher has compared the percentages and computed Pearson product-moment correlation coefficient to measure the correlation between students' attitude towards chat and alcohol use.

In analyzing chat and alcohol use distribution equal number of participants (i.e., 36(30%)) were found to be users of chat and chat and alcohol, while only 20(16.67%) of them were users of alcohol. Whereas, 28(23.33%) participants were found to be free from chat, alcohol and their combined use.

The calculated correlation value, ($r = 0.47$, $N=120$, $P < 0.0005$) also shows a significant but a moderate degree of correlation. The calculated correlation value would also be helpful, for further discussion. All r-values for the different groups of chat and/or alcohol users are tabulated below.

Table 14: The Strength (degree) of Association between the Different Groups of Participants' Attitude towards Chat and Alcohol use

USER TYPES	Correlation between attitude towards chat and alcohol	Number of Students
General(over-all): All Participants	0.466*	120
Specific Groups: Chat(only) users	0.601*	36
Alcohol(only) users	0.600*	20
Chat and Alcohol users	0.611*	36
Non users of Ch. &Al.	0.624*	28
Chat Users: Heavy users	0.297*	54
Light users	0.715*	18
Non Users	0.575*	48
Alcohol users: Heavy users	0.167	41
Light users	0.917*	15
Non Users	0.571*	64
Total : All Alcohol users	0.517*	56
All Chat users	0.495*	72

*P<0.01

From Table 14 above, it is possible to observe a strong attitudinal association between the light users' of chat and alcohol towards chat and alcohol (combined use) use. Both chat and alcohol heavy users attitude towards chat and alcohol use (combined use) were found to be significant but very weak and non-significant, respectively. This is so because, most of the heavy users of chat were Muslims who did not drink alcohol and have low and negative attitude towards alcohol and alcohol use vis-à-vis Christians who drink alcohol frequently but not chew chat.

Reasons for Chat and Alcohol use

The initiative and maintenance reasons for chat and alcohol use are many in number and vary along with different variables such as physical and social environment, personality factors of the user, educational level, age and sex. But, some reasons seemed to be more applicable to specific social, age, sex, education and other groups. As such, part four of the self-report questionnaire consists of five items, which provide the psychological, sociological, cultural, religious as well as educational pictures of the tertiary level students' chat and alcohol use reasons. These students were asked to indicate the five items in rank orders. The ranked weight means for each item, as weighted by all respondents, and the final rank order are tabulated below.

Table 15: Respondents Approval Rate and Final Ranks of Chat and Alcohol use Reasons

Order	Items	CHAT USE			ALCOHOL USE		
		% out of the total resp.*	Mean	Final Rank	% out of the resp.**	Mean	Final Rank
1	For concentration	52.83	2.09	1	5	3.03	2
2	To improve Study	37.73	2.75	2	20	3.25	4
3	For relaxation	11.32	2.85	3	6.5	1.28	1
4	To facilitate rote memory	32.08	3.49	4	27.5	27.5	3
5	To score high grades in exams.	43.396	3.89	5	57.5	57.5	5

*&** 106 of the total participants ranked all five reasons for chat uses as each item weighted for them.

And, only 80 of participants ranked all the five reasons and 12 (most of them are heavy users) other participants ranked only "For relaxation" as the first reason for alcohol use.

As shown in Table 15 above, 52.83 percent of the respondents approved "for concentration" as the first reason of chat use, while only 5 percent of the respondents approved it as the first reason for alcohol use. "To improve study", "For relaxation", "To facilitate rote memory" and "To score high grades in exams" were also approved by 37.73, 11.32, 32.08 and 43.396 percents as the second, third, fourth and fifth reason for chat use, respectively; while only 20 percent, 6.5 percent, 27.5 percent respondents approved them in their respective order as reasons for alcohol use.

But, many of the reasons were also approved in better position than the previously ranked order. This being so, the researcher summed the ranking values of each item given by all the respondents and calculated the mean for each item. In this case, the highest mean value showed the last reason for chat/alcohol use and the lowest mean value showed the first reason of chat/alcohol use, as approved by all the respondents, respectively. As such, "For relaxation," "For concentration," "To facilitate rote memory", "To improve study" and "To score high grades in exams, were ranked from the first to the fifth reasons for alcohol use by the respondents. However, the five reasons remained in their original position (ranked order) as reasons for chat use (see Table 16). As a conclusion the researcher noted that other possible reasons, especially for alcohol use, must be added in studying reasons for initiating and maintaining chat and alcohol use. Because the

response rate (only 80 (75%) participants ranked the five items as reasons for alcohol use, for example) was low.

The researcher has also computed Spearman's rho (r_s or p) to check the designated students' agreement on their reason for chat and alcohol use. But, it was found that it did not appear to be a significant association between students agreement on their chat and alcohol use reason (rho = + 0.5, N=5). However, the association was positive, and the relationship may be found to be a significant one if a large number of items were used.

Table 16: Respondents Approval Rate on Chat and Alcohol use Reasons (by users and Non users)

ITEMS (REASONS)	CHAT USE				ALCOHOL USE			
	USERS		NON-USERS		USERS		NON-USERS	
	% out of total resp.	Mean (X)	% out of total resp.	Mean (X)	% out of total resp.	Mean (X)	% out of total resp.	Mean (X)
For concentration	56.25	1.94	52.38	2.33	0.00	2.86	10.53	3.26
To improve study	37.50	2.72	38.095	2.81	14.29	3.38	26.32	3.11
For relaxation	9.38	2.84	14.29	3.14	0.00**	1.05	0.00*	1.63
To facilitate rote memory	37.50	3.44	19.05	3.095	28.57	3.43	26.32	3.00
To Score high grades in exams	46.88	4.06	38.095	3.62	52.38	4.29	57.89	4.00

*&** No participant has approved as third reason, but 95.23 percent alcohol user and 89.47 percent non-alcohol user respondents approved it as a first reason.

As shown in Table 16 above, "For relaxation" as a third reason for chat use was approved by a small proportion of respondents. Whereas the calculated mean value for chat users did not allow to change its position, although the

calculated mean for non users of chat and the response rate approved its ("for relaxation") positional change. For this reason, Spearmans' rho was computed to check the respondents' agreement (users V_s non users) on their reason for chat use. But, it did not appear to be a significant association between the respondents (users V_s non users) agreement on their chat use reasons. However, the calculated statistic (rho = + 0.6, N=5) indicated a positive association, and the relationship may be found to be a significant one if a larger number of items were used.

Only "To score high grades in exams" was highly approved as the fifth reason for alcohol use by both users and non users of alcohol. But, small number of respondents approved the other four items. Even the approval rate was found to be small, it was found that, it appeared to be a significant association between respondents agreement on their alcohol use reason. The calculated statistic (rho= +0.9, N=5, $p < 0.05$) showed a strong significant, positive relationship (agreement) on the respondents (users V_s non users) reason for alcohol use.

Discussion

In general terms the results corresponded well with the theoretical predictions. For further explanation the discussion continues as follows:

Chat use Habit Initiation

There was no previous study on places where students developed chat use habit and their in-campus frequency of chat use. The present study revealed the before-campus (off-campus) nature of chat use habit initiation among the student population. This is so because chat is consumed every where in

the country by all population groups (Seyum and Ayalew 1996) and it cuts through many faiths and age groups (Amare and Krikorian, 1973:370). Particularly interesting, here, is the relatively similar trend on chat use frequency among the student population who joined the University with and without chat use habit.

Prevalence of Chat and/or Alcohol use

The prevalence of chat use among the student population in general (Zein 1984, Amare and Krikorian 1973, and Seyom and Ayalew 1986) and A.A.U. Students in particular (Mesfin 1992, Allene 1992) is high and growing for unscientific reasons. But there was no study on the prevalence of alcohol use among the student population. There was also no statistical data about the extent of alcohol use in the national level (Andargatchew 1988), although adolescents have no problem of access to alcohol, as complained by Children's and Youth Affaires Organization (1995).

The present study, however, has revealed many statistical facts of interest, on the problem in question to both the extent and frequency of chat, alcohol and their combined use. In this survey, chat users accounted for 60 percent of the total student population. This result is relatively similar with Allene's (1992) study but much far from Zein's (1984) study among Gonder students. It is due to the differences in the study time period, sample size, instruments used and the increasing nature of chat users through time. Thus, it is possible to conclude that chat chewing among the student population was high. The conclusion for alcohol use prevalence is not also far from chat use prevalence. 30 percent combined use rate is also dangerous.

Generally speaking, the extent of chat, alcohol and their combined use among the student population was found to be high in this specific study.

Similar to the findings of chat and alcohol use prevalence were the resulting data obtained from the frequency of chat and alcohol use. The proportion of chat users' type is also relatively similar to the findings revealed by Allene (1992). It is due to the basic similarity in the instrument used and the sample size. The study setting has also contribution for such similarity. In short, the highest proportion of heavy users of chat and alcohol has been found in this specific study.

Association between Chat and Alcohol Use and the Background Variables

The analyses revealed a significant association on the extent of chat and alcohol use and the frequency of alcohol use among students in the two religious groups. In this specific study, many Muslims were found to be heavy users of chat and non users of alcohol as many Christians were heavy users of alcohol and non users of chat. It is possible to conclude that the prevalence of chat use was highly related to the Islamic religion as the frequency and extent of alcohol use was related to Christianity. But, these associations were not that much strong as revealed by Cramer's Phi (∅) statistic. It was also interesting to know the reduction of 48 percent prediction error of a student's religion by knowing the student's alcohol use habit and a reduction of 46 percent prediction error of a student's alcohol use habit by knowing his religion, as shown from the statistic of the Index of predictive association.

Another interesting variable that was studied to check its association with chat and alcohol use was the participants' educational level. Contrary to the association between chat and alcohol use and religion, however, there was no significant association between chat and alcohol use, both in frequency and extent, and educational level. And second year students were found to lead both in frequency and extent of chat and alcohol use. The most interesting fact, here, is that most students developed the habit before joining the campus.

In addition, there was no significant association between the frequency of chat and alcohol use and age groups. The only significant association found was between the extent of chat use and age groups. But, its strength was very low. The prediction errors were also found to be only 15 percent and 13 percent fewer than knowing a student's chat use habit and his age group, respectively. All these facts suggested that chat and alcohol use have no association with the users' age.

Attitude Towards Chat and Alcohol and Their Usage

A very interesting fact, here, is that students from any frequency group of both chat and alcohol use have scored below half of the maximum score, on average. Even the heavy users group did not score that much higher than the second quartile. In addition a number of students have confessed that they were non-users of chat, although they have scored greater than six in the student chat use scale. From all these, it is possible to conclude that university students have knowledge about the negative effects of chat and chat use, although they use it for unscientific reasons or for its compulsive

(dependency) problem. However, it shows at least the discrepancy between their knowledge and behavior.

Interestingly, the three groups of both chat and alcohol users showed statistically significant differences in their attitude towards chat/alcohol and chat/alcohol use. Further more, Scheffe's method of multiple comparison of means revealed the highest significant difference between heavy users V_s non users and heavy users V_s light users of chat and alcohol. But, non-significant differences were shown between light (occasional) users and non-users of chat and alcohol. All these discussions about the overall attitudinal difference towards chat/alcohol and chat/alcohol use, except the numerical differences, also holds true for positive sub-scale attitudinal differences. The only difference between the overall and the negative sub-scale attitudinal differences is that there is a non significant difference between heavy and light alcohol users, in the negative sub-scale attitudinal test.

Interdependence between Students Attitude Towards Chat Chewing and Alcohol Taking (Combined Use)

The UN Document (1987) stated that the consequences of combined use of any drugs is far dangerous and facilitates the individual's dependence to the drugs. Since chat produces thirst (Amare and Krikorian 1973) and as it is a mild stimulant (see the WHO classification of Drugs of Abuse) many people use a liquid depressant drug (i.e., Alcohol) after chewing a bundle of chat (Amha 1984). This fact should force us, at least, to accept the possibility of

combined use of chat and alcohol, although chat or alcohol is not considered as an initiative to the usage of the other drug. A number of researchers, such as Zein (1983), Amha (1984) and Seyum and A.Gebre (1995) have also strengthened this fact when they revealed combined and multiple drug use in their respective studies.

Evidence reported in this study indicated that combined use of chat and alcohol among the designated students is generally high. One of every two chat users was found to be users of alcohol, in this survey. But, the present combined use rate has found one-third of what Amha (1984) has revealed in his study (see section 2.3 under 'Literature review'). This is so because Amha has conducted his research on voluntary participants who experienced chat chewing for more than one year. The sampling size, the instrument used and the research settings were also other facilitative/convenience factors for such wide gap.

The strong significant attitudinal association among light users of chat and alcohol was also another interesting fact. Such a strong significant attitudinal association towards chat and alcohol use was also a characteristic of combined users. Except heavy users of alcohol, all groups of students showed a significant attitudinal association towards chat and alcohol use. In other words, if a student has a negative (Positive) attitude towards chat use, he showed a negative (positive) attitude toward alcohol use also. Here, it is also important to note that most of the heavy users (14) of alcohol were Christian students who never used chat as the Muslims (20) who were found to be heavy users of chat but non-user of alcohol. From all these, it is

possible to conclude that the relative equality in the number of Muslim and Christian participants (equality in sample size proportion) has an effect on the attitudinal association towards chat and alcohol use. This is so because any individual from either of the two religious groups was found to be heavy user of one substance but non-user of the other substance.

Reasons for Chat and Alcohol Use

A further objective of the study was to examine students' agreement on their reasons for chat and alcohol use. In this finding, the respondents, as a whole, approved all the five items in their original position as reasons for chat use. But, these items were found to change their position as reasons for alcohol use. The calculated statistics (rho= + 0.6, N=5) for users and non users of chat needs some more items to be significant. A clear agreement was found on students alcohol use reasons, between the users and non users group. As a whole, there should be some additional items to make the total respondents' reasons for chat and alcohol use and the total chat users V_s nonusers' reasons for chat use significant. It will also increase response rate.

CONCLUSION AND RECOMMENDATION

In general, evidences from the foregoing discussion tend to approve the prevalence (both in extent and frequency) of chat, alcohol and their combined use among the student population under study. Most of these students joined the University with the habit of chat chewing. For this and similar reasons there was no association between chat use and the user's educational level or age group. The only significant association was found between the students' religion and the extent and frequency of chat and alcohol use (frequency of chat use is not included). But, the associations were not that much strong. There was also a discrepancy between. the students' attitude and behavior towards chat and alcohol use.

In light of these evidences and their many dimensional threats and intimidation that have been adequately treated in the previous chapters, the following general and specific recommendations, given the small sample size, are in order.

- As chat use was found to be a before campus phenomena, a national youth policy that incorporates strategies and measures to promote the psychological and social development should be formulated and implemented as an integral part of national and regional development. However, it is also equally important to increase the involvement of Youth in the conceptualization, planning, and implementation and follow up of such a policy.
- Since the prevalence of chat, alcohol, and their combined use, both in extent and frequency of use, is found to be high, the authorities in this

university should establish an early prevention strategy program. Although many students come to the university with such problems, this strategy will help them to cut off their habit. Most interestingly, this strategy will be helpful for students who never used chat and alcohol. To do this, information and research activities on the frequency, extent, manner of use and the general problems associated to chat and alcohol use among the student population should be systematically undertaken by the concerned authorities.

- The creation of a supportive environment that enables the active involvement of the newly established anti-drug movement members in promoting the students awareness towards the negative effects of chat and alcohol use is a priority concern of the university authorities. This is so because, the prevention of chat and alcohol use habits now lie in the hands of the individuals or groups who are in problems.
- Experiences proved that the bitter control of the campus police on chat and alcohol use among the student population was less effective. Moreover, any control strategy, without the involvement of the student population is found to be a problem by itself. Such measures facilitate the use of other drugs, as described in the review of literature, instead of solving the problem. As such authorities should create a supportive environment for meaningful discussion on the total pattern of habits, perceptions and motives toward chat, alcohol and their combined use among the student population.

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