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EFFECTS OF *KHAT* CONSUMPTION ON THE PHYSICAL HEALTH OF CONSUMERS' FAMILIES IN MERU COUNTY, KENYA

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Abstract

Physical health of families is of paramount importance, especially when associated with Khat consumption. The purpose of this study was to investigate the effects of Khat consumption on the physical health of consumers' families. The study used Reference Group Theory, by Herbert & Singers, (1968); *Social Learning Theory by Newman and Newman, (1999) and Symbolic Interaction theory by Andersen & Taylor, (2004). This study used a cross-sectional descriptive design. The study was carried out in Meru County because it's the traditional home of Khat trees in Kenya which plays diverse roles in the many social aspects to date. A multi-stage sampling technique involving purposive, simple random and systematic methods were used to select the county, three sub-counties, six wards and 583 households. The family heads from the selected households* were *automatically included in the sample population. Data were collected through face to face interviews with selected family heads who were consumers of Khat. The study also used key informants guide, Focus Group Discussions (FGDs) and observation checklists. Results from a linear regression analysis indicated that, there was no relationship between Khat consumption and consumers physical health indicated by study variables such as lack of sleep.*

Key words: *Khat* consumption, physical health, consumers' families

Introduction

The study investigated the effects of *Khat* consumption on the physical health of consumers' families among family heads in Meru County. According to Adams & Trost, (2005), Wellbeing is a condition of holistic health in all its dimensions: Physical, emotional, psychological, social and spiritual, which is totally in agreement with (Diener, 2009; Diener & Suh, 1997; Michaelson, Marks, & Thompson, 2009). Furthermore, wellbeing consists of a range of what is worthwhile for a person: particularly in a meaningful social manner such as feeling happy and hopeful, living according to acceptable values, supportive environment, coping with challenges through the use of appropriate life skills and having security, protection and access to quality services such as health and education. Other research findings have placed different emphases on what wellbeing is: happiness, Pollard & Lee, (2003) and life satisfaction (Diener & Suh, 1997; Seligman, 2002).

Wellbeing of families is a priority among nations of the world. This is because functional governments have strong foundations within families (McGillivray and Clarke, 2006). In African societies, families were greatly valued because they define their continuity and strengthened their existence as a social entity (Adams & Trost 2005). Today, wellbeing of

families is also among the top agenda for many governments in Europe, Asia and Africa. Accordingly, families are central to both developed and developing countries and any socio-economic issue related to the families is closely evaluated. Similarly, *Khat* consumption among family members is a matter of concern to individuals, families, communities and governments. Despite the global recognition for the need for favourable family wellbeing, *Khat* chewing is rapidly increasing worldwide because of its availability. According to Zeleke, Awoke, Gebeyehu, and Ambaw (2013) about ten million people are estimated and classified as daily *Khat* consumers worldwide.

The World Health Organization (1997) presented wellbeing as a broad concept affected in a complex way by a person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. Wellbeing of families is influenced by a number of issues because of its multi-dimensional nature; thus consumption of *Khat* by family members have far-reaching social, economic, physical, and psychological health effects on the wellbeing of its members. As much as growing of *Khat* has some economic gain for the regions where it is grown and Kenya as a whole, its consumption undermines personal, social and national development with respect to productivity, safety and welfare of public institutions and community life (Hansen, 2010; Kassim, Islam, & Croucher, 2010).

In Djibouti, every day, people flock to houses and cafes in groups to chew *Khat* quietly with their friends. According to Reuters (2007), "it was reported that, Djibouti men sit on pillows beside small piles of stems and cigarette packets, munching mouthfuls of the green narcotic." This has been made possible by the availability of fast transport, such as flights, which ferry *Khat* every day to Djibouti from Ethiopia which is then sold in small shops across the country (Kassim et al., 2010). Use of fresh leaves of *Khat* acts like a stimulant and causes intoxicating effects (Alem, Kebede and Kullgren, 1999). It keeps the user awake and interferes with the reception of well-coordinated information.

Traditionally, *Khat* consumption was deemed acceptable during specific social activities such as marriage ceremonies and during festivities such as celebrating the birth of babies, initiation ceremonies, post-harvest and other social events. This has been the cultural practice for many communities in Kenya that used and consumed substances such as alcohol, tobacco and *Khat.* This cultural practise was done within the cultures of the communities. Their use was observed with the culture and traditional rules and values that strictly prescribed the circumstances under which these substances could be obtained, used and consumed (Shauri, 2007).

Restriction of consumption to such periods and events acted as regulatory mechanisms aimed at controlling abuse (Shauri, 2007). However, this strong cultural and traditional control mechanism over abuse of drugs and other substances such as *Khat* has been eroded over time by the process of modernization (Haji, 1985; Hoffman & Al Absi., 2010) and easy availability of such substances from place to place. This has made such substances available to a wider cross-section of people; which has direct or indirect effects on the wellbeing of families. Furthermore, *Khat* is a social drug which has both socio-economic and health effects on the consumers (United Nations Educational Scientific and Cultural Organization [UNESCO], 2013). In fact, in Meru County *Khat* remains one of the items of exchange before any marriage negotiations could commence. This practice has been retained by the Igembe and Tigania sub-groups of the Meru people to date (Mugambi, 2005).

In the colonial Kenya, the British Government realized the problems associated with *Khat* use, especially amongst its military personnel and local administrators and imposed control measures in the then British Colony and East African Protectorate in 1939. The first serious step was taken when an Act prohibiting the use and sale of *Khat* was enacted in 1952, *Miraa* Prohibitive Act of 1952 (revised, 1962) Laws of Kenya, Chapter 339. The *Miraa* Prohibitive Act was suspended in January (1977) by the first Kenyan President, the late Mzee Jomo Kenyatta. Today, in Kenya, *Khat* is readily available in local markets and is also exported. Thus, in *Khat* growing areas nearly every household own *Khat* trees making it readily available for consumption. Studies have been conducted focusing on the effects of *Khat* growing and consumption on education (Mugambi, 2005; UNESCO, 2013).

Statement of the Problem

Wellbeing of families is a growing area of concern, especially when associated with drug and substance abuse. In fact, this is a worldwide concern as captured by various bodies such as the World Health Organization, governments and Non-governmental Organizations (NGOs). Apparently, the available literature on *Khat*, reveals, many contradictions brought forth by both western and African studies pertaining to the effects of *Khat* consumption, with some citing positive (such as its economic and social cohesion) and others citing negative effects to health, social and psychological aspects of human life. Many glaring gaps in knowledge still persist. More precisely, studies have been done on the effects of *Khat* consumption on Education (Mugambi, 2005); Nutrition (Ringera, 2013) and Health (Guantai, 1982).

There is need for this study on the effects of *Khat* consumption on the wellbeing of families because if *Khat* chewing continues, it will affect the education sector with low enrolment as well as lack of basic needs. The families' and communities may also result to loss of human and financial resources due to *Khat* consumption. The diversion of resources to *Khat* consumption habits influences the wellbeing of families. Additionally, there are no specific studies that have assessed the effects of *Khat* consumption on the wellbeing of families underscoring the need for this study in Meru County, where *Khat* is extensively grown and consumed.

Effects of *Khat* Consumption on the Physical Health of Families

According to Klein (2008); ACMD, (2013), *Khat* use among immigrants in London neighbourhoods resulted to low anti-social behaviour such as noise, smoking cigarettes on the pavements and fighting. These ant-social behaviours according to the two reports can only be controlled if tangible legal frameworks are developed to regulate *Khat* consumption to minimise its effects on the consumers and their families. The findings further indicated that *Khat* use facilitated interaction and communication among immigrants in London.

Griffiths (1998) report did not consider *Khat* use among immigrants in London as dangerous to the families and did not associate importation ban to consumption effects. He carried out a survey of two hundred and seven Somalis living in London. The use of *Khat* was associated with cultural identity, high unemployment and more free time available for the practice. The effects of *Khat* chewing reported were anxiety, irritability, agitation and aggression. Cigarette

smoking was reported by three fifths of the respondents, with only a minority 6% who admitted use of cannabis as they chewed *Khat*.
Patel and Murray (2005) reported low crime rate and violence associated with *Khat* consumption. Among the women, only six out of 602 respondents reported association of *Khat* with domestic violence but among the Ethiopians and Yemenis, there was no mention of any link of violence to *Khat* consumption.

Additionally, Bhui and Warfa (2010) carried out a study to investigate whether there was a relationship between *Khat* use and psychotic disorders among Somali immigrants in the UK. The study had a population sample of 180 Somali men and women. The study findings indicated that, there was no relationship between *Khat* use and psychotic disorders. The study also reported that, the frequency of *Khat* use was not associated with common psychotic symptoms of anxiety and depression. The study associated the finding with the environmental conditions where *Khat* was used by the Somali immigrants.

Doughlas, Boyler, and Lintzeris (2011) did a study to identify the patterns of *Khat* use among Somali-Australians in Australia and to explore their views about the links between *Khat* use and personal health. The study administered semi-structured FGDs among adult members of Somali communities in Brisbane. The study reported increased energy, lack of sleep, anxiety, loneliness and reduced appetite among the *Khat* chewers. This study provided insights on the effects of *Khat* use thus it provided background information on the subject matter of the current study though no linkage was demonstrated by the study on its effects on the wellbeing of families.

Family breakdown was reported by UK Somali Women as the most serious consequence of *Khat* consumption (Turning, 2004). Similarly, Sundhedsstyrelsen (2009) did a study in Denmark, among Somali resident and reported that two thirds of Heavy *Khat* users were divorced and had not completed secondary school. This, according to Milanov (2008) could have been due to diversion of income to *Khat* chewing and neglect of family responsibilities.

Giannini, Burge, & Shaheen (1986) found out that regular chewing of *Khat* led to adverse effects on health and socio-economic status of the families. They reported effects such as loss of work hours, decreased socio- economic productivity, malnutrition and diversion of resources meant for family use. The above effects were reported in *Khat* chewing communities in Ethiopia, Somali, Uganda and Kenya. The same studies also reported that moderate use of *Khat* led to desirable results such as, enhance work performance and increased workout.

Khat consumers commonly divert their income into *Khat* chewing related activities, neglecting their families' needs (Kalix, 1987; (Numan, 2004). Other effects they reported were that *Khat* chewing was a widespread habit among students, employees and housewives. The sample size was 800 respondents of ages (15-76) years. The study concluded that *Khat* chewing was not associated with adverse psychological effects. *Khat* has furthermore been implicated as a causal factor for family instability, divorce and violence (Elmi, 1983; Muthuri & Muchui, 2012). The average family income can sometimes be halved to support *Khat* chewing (Basher & Sadoun, 1983).

Haji (1985) did a study on the socio-economic related to *Khat* use and abuse in Garissa, Kenya. The sample size was one hundred and fifty respondents randomly selected from the same number of households. The study findings showed that Rapid social change 60%, availability of *Khat* 5%, boredom 35%, and influence from friends 50% encouraged its consumption. Other

effects reported were marital instability, child neglect, poor health, poverty and neglect of work by *Khat* consumers.

United Nations Educational Scientific and Cultural Organisation [UNESCO], (2013) report indicates that *Khat* is a social drug that has both social and health effects on the users. The study used a cross-sectional survey design and collected data from varied range of stakeholders from Embu County. The study found that, *Khat* business had adverse effects on education in Embu County. The study also cited lack of effective strategies to mitigate the effects of *Khat* consumption on schooling. Notably, education is one of the aspects that contribute to the general wellbeing of the family institution.

Theoretical framework

The main aim in this section is to outline the major theoretical perspectives which guided the research. This is in realization of the fact that any sociological analysis involves theorizing because the act of research itself necessarily involves making certain questionable propositions about the nature of social reality and how it becomes intelligible to us. In this view, this study was guided by three theories, which enhanced the understanding of the subject of study and the interaction of study variables. According to Singleton (1998:24), "all empirical studies should be grounded in theory". Kombo and Tromp (2006:56) defined "a theory as a reasoned statement or groups of statements which are supported by evidence, meant to explain a phenomena".

Reference Group Theory

This theory is credited to Herbert & Singers, (1968). According to Herbert and Singers (1968), "Men shape their attitudes to reference groups other than their own". The references groups, according to them, are the groups within which individuals are members or aspire to maintain membership. Such groups provide a form of reference and attitude formation for members. The basic assumptions of reference group theory are that an individual's attitudes and conduct are shaped by the group in which he has membership and that self-appraisal and the correlative feelings and behaviour flow from the individual's location in a particular group within a social hierarchy. This point is collaborated by the psychology of groups which states that in a group environment, individuals will conform to the norms of the group so as to have a sense of belonging. The choice of a reference group according to these authors is based on simple assumptions about motivation and maintenance of social patterns which are of value to the group members. In their view, group members have their own set rules and they understand their limits.

Social Learning Theory

According to Newman and Newman (1999), the key tenets of social learning theory are that, learning is not purely behavioral; rather it is a cognitive process that takes place in a social context. Learning can occur by observing behaviour and by observing the consequences of the behaviour (vicarious reinforcement). Additionally, learning also involves observation, extraction of information from those observations, and making decisions about the performance of the behaviour (observational or modeling). Consequently, reinforcement plays a role in learning but is not entirely responsible for learning. Finally, the learner is not a passive recipient of information. Cognition, environment, and behaviour all mutually influence each other (reciprocal determinism).

Accordingly, Social learning theory considers the formation of one's identity to be a learned response to social stimuli. It emphasizes the societal context of socialization rather than the individual mind. This theory postulates that an individual's identity is not the product of the

unconscious (such as the belief of psychoanalytic theorists), but instead is the result of modeling oneself in response to the expectations of others. Behaviors and attitudes develop in response to reinforcement and encouragement from the people around us. While social learning theorists acknowledge that childhood experience is important, they also believe that the identity people acquire is formed more by the behaviours and attitudes of others (Abraham, 1992).
The concept of social learning evolved from awareness that much learning takes place as a result of observing and imitating other people's behaviour (Newman & Newman, 1999). Thus, changes in behaviour occur without being linked to a specific pattern of positive or negative reinforcement and without numerous opportunities for trial and error practice, but merely from the imitation of observable models. This means that according to the Social Learning Theory, imitation is emphasized as the mental process through which, one can learn certain behaviour and also acquire a motivation to perform or resist performing that behaviour depending on what is learned about the behaviour (Andersen & Taylor, 2004; Newman & Newman, 1999). In this way, through observational learning, both young and old people become acquainted with the general concepts of situations as well as specific behaviours.

According to Berk (1999) parents influence their families' behaviour and social relationships. This fact explains why consumption of Khat is entrenched in families. The rules for behaviour in each social setting are constructed from what has been observed in watching others and what happened to them following their behaviour in the past and what one understands about the demands in the immediate situation (Newman & Newman, 1999). This theory is important for understanding why people indulge in Khat consumption and other Khat- consumption behaviours. Most people learn from their social environment and according to the interpretation of what they consider worthwhile. This is where families and other social environments play a major role in either practicing the learnt behaviours.

Symbolic Interaction Theory

The symbolic interaction perspective, also referred to as symbolic interactionism, is a major sociological framework which relies on symbolic meaning that people develop and rely upon in the process of social interaction. Although this theory traces its origin to Max Weber's assertion that individuals act according to the interpretation of the meaning of their world, the American Theorist George Herbert Mead introduced this theory to the American Sociology in the 1920s. Herbert Blumer coined the term "symbolic interactionism".
According to Eshlemon, Cashion, & Basirico, (1993), symbolic interactionists assumes that society exists within every socialized individual and that its external forms and structures are through the social interaction taking place among individuals at the symbolic level.

Symbolic interaction theory analyses society by addressing the subjective meanings that people impose on objects, events, and behaviours. Subjective meanings that people are given primacy because it is believed that people behave based on what they believe rather than what is objectively true. Thus, society is thought to be socially constructed through human interpretation that forms the social bond. The social bonds are known as the definition of situations in society.

According to Andersen and Taylor (2004), People do not act or react automatically but carefully consider and even rehearse what they are going to do. They take into account the other people involved and the situation in which they find themselves. The expectations and reactions of other people greatly affect each of the individual's actions.

According to Symbolic Interaction perspective therefore, human behaviour is determined by the social and cultural environment within which they live". In this way, as social beings, humans act in response to other people's actions. They make symbolic meaning out of other people's actions, modify the meanings and eventually interpret them to fit in their situations. Depending on the interpretation derived, they may want to copy other people's behaviour thereby reaching a common understanding of reality and consequently displaying a common response (Giddens, Duneier, & Appelbaum., 2005).

Symbolic Interaction theory assumes that one is not under any obligation to act or think as the group members dictate. Antithetically, the Symbolic Interaction theory, asserts that external forces do not determine action but can influence behaviour patterns. This helps people in developing their own orientations to define and shape their social reality. This may lead to other alien behaviours, which are not in tandem with the group norms, hence a high likelihood that the non-chewers may end up adopting these values to fit in the social group or even develop deviant behaviours which are alien to the prevailing ones (Giddens, 2001).

From the interactionists' perspective, meanings are created, modified and changed by actors in interaction situations. To understand social actions, sociologists must examine the process of interaction and interpretation of meanings that develop within it and which guides and directs the action of the actors, who are in this case, consumers of *Khat*

Research Design

This study adopted cross-sectional descriptive survey design to assess the effects of *Khat* consumption on the wellbeing of families. The study answered the questions of who, what, when, where, and how issues associated with *Khat* consumers wellbeing in Meru County. The potency of descriptive design is that it yields rich data that leads to useful study recommendations. The current study points to potential areas for further research.

Descriptive studies provided a 'snapshot' of the outcome and the characteristics associated with it at a specific point in time. A descriptive cross-sectional survey design was deemed appropriate for this study because it collects information by interviewing or administering questionnaires to a sample of individuals (Orodho, 2003). Descriptive research is used to obtain information concerning the current status of the phenomena and to describe "what exists" with respect to variables or conditions in a situation (Anastas, 1999). In this study, the researcher conducted a face-to-face interview to obtain responses on issues related to *Khat* consumption on the families' wellbeing. In-depth and detailed accounts of social, physical and psychological health effects of *Khat* consumption were also obtained through discussions held with the key informants and Focus Group Discussions (FGDs). This mode of administration yielded a high rate of response although it was expensive and time consuming. FGDs are a method of collecting data that taps into the dynamism of human social interaction on the social, physical and psychological effects of *Khat* consumption on the wellbeing of families. The study also used observation methods such as checklists and pictures, which supplemented the information gathered through interview guide and FGDs.

Given that the study was conducted at one point in time, a cross-sectional survey was best suited for this study. The study focused on capturing and drawing inferences from existing differences among the subjects, in this case the *Khat* consumers. This design helped in examining the relationships between variables at one moment in time. Moreover, the cross sectional survey allowed for the collection of data from a large number of subjects (583).

Distribution of Sample Population by Sub- County and Ward

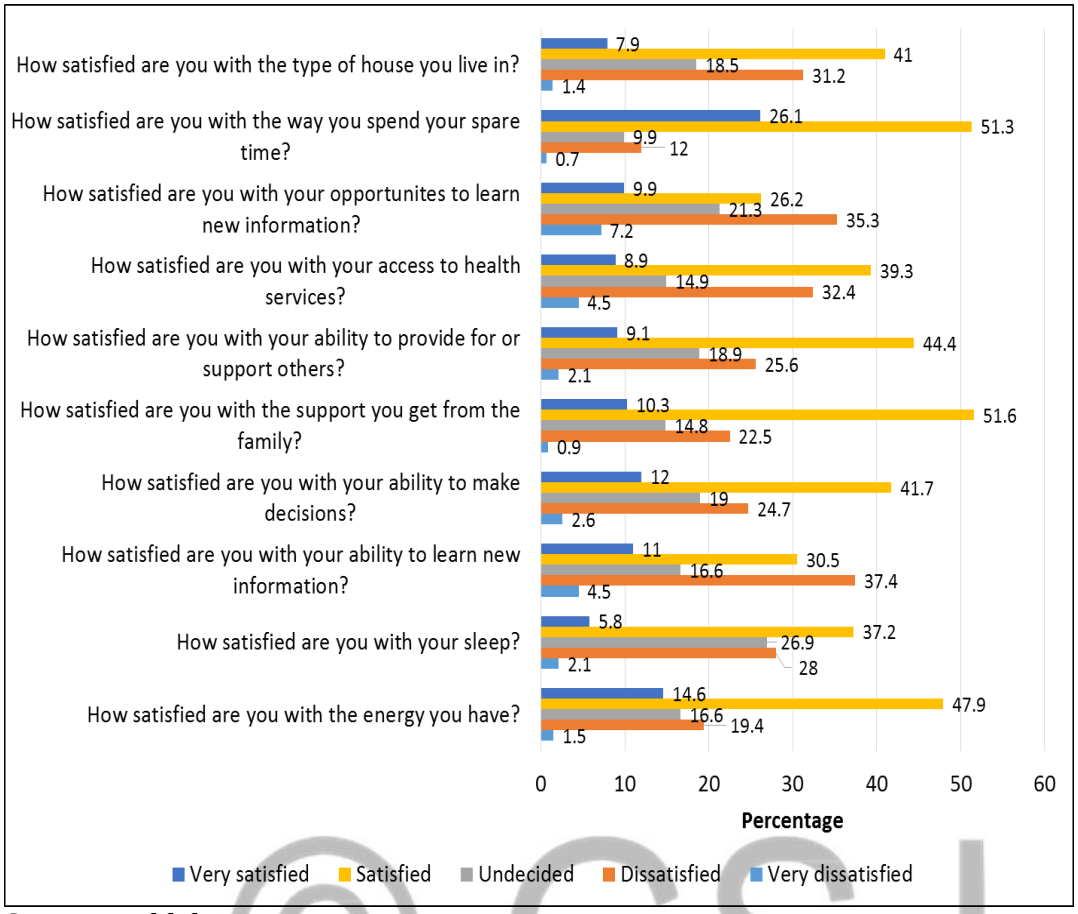
Sub- Counties	Wards	No. of households	Sample size per ward: 10%
Igembe North	Ntunene	560	56
	Antubetwe Kiongo	1449	145
Igembe South	Antubochiu	667	66
	Kanuni	897	90
Igembe central	Akirang'ondu	1040	104
	Kangeta	1214	122
Total		**5827**	**583**

Source: Kenya National Bureau of Statistics (KNBS)

Data Analysis

Effects of *Khat* Consumption on the Physical Health of Consumers'

It was found prudent to find out the effects of *Khat* consumption on the wellbeing of families measured by physical health. Here the respondents were required to indicate their level of satisfaction on certain wellbeing aspects. The responses were based on a five-point Likert Scale. The respondents were required to indicate what best applied to them from the following options: Very dissatisfied (1), dissatisfied (2), undecided (3), satisfied (4) and very satisfied (5). The respondents based their responses on the level which best described themselves. The attributes are presented in question form and results were tabulated using percentages as presented on Figure 4.2.



Source: Field data

Figure 4.2: Effects of *Khat* Consumption on Physical Wellbeing of Families

Findings in Figure 4.2 reveal that slightly over two fifths 41% of the respondents were satisfied with the type of houses they lived in, while, slightly less than one fifth 18.5% were undecided about their satisfaction with the type of house they lived in. This implies that the ability to provide basic needs such as shelter for the family is an important aspect in explaining the wellbeing of families. This finding is inconsistent with Aden et al. (2006) who reported that 50% of the respondents were not satisfied with the type of houses they lived in, though they lived in traditional grass-thatched houses while others in polythene covered shelters in a nomadic pastoral setting.

Similarly, over half 51.3% of the respondents were satisfied with the way they spent their spare time, with only 12% reporting being very dissatisfied. This finding is not a surprise because the respondents had stated that they mainly consumed *Khat* to pass time and due to peer influence. This may mean that they felt satisfied, for they considered their spare time to be well spent in the company of other *Khat* consumers. This finding concurs with that of Alem et al. (1999) who reported that *Khat* use enhances leisure activities, hence facilitating interaction among family members. Accordingly, when *Khat* consumption takes place during the consumers' free time, especially after a hard day's work, it enhanced interaction as consumers relaxed, discussed the day's happenings and it enhanced their business practices. This findings also concurs with that George et al. (1995) in their study which reported that *Khat* chewing helped the consumers to relax , reduce boredom and be ready for the next day's work.
Further, Figure 4.2 shows that almost two fifths 39.3% of the respondents were satisfied with their ability to access health services, while 32.4% were dissatisfied with their ability to access

health services. This indicated that access to health services was limited in *Khat* consuming families due to use of resources to sustain *Khat* consumption. This can be explained by diversion of income to *Khat*-related habits which has negative effects on the wellbeing of families. This finding concurs with that of Numan (2004), who revealed that *Khat* chewing habits lead to diversion of income, which may make consumers neglect their family needs such as healthcare.

It emerges from the findings in Figure 4.2 that over two fifths 44.4% of the respondents were satisfied with their ability to provide support for others in their families while over one quarter 25.6% were dissatisfied with their ability to provide support for others. Similarly, over half 51.6% of the respondents were satisfied with the support they got from family members. This can be explained by the fact that *Khat* consumption and its related habits is supported by family income thus making the family heads unable to care for other people.

In Figure 4.2, it is shown that slightly over two fifths 41.7% were satisfied with their ability to make decisions, while over one quarter 25.6% were undecided on the level of satisfaction of their ability to make decisions. However, more than one quarter 30.5% of the respondents were satisfied with their ability to learn new information with almost two fifths 37.4% being dissatisfied. Further, slightly less than two fifths 37.2% were satisfied with their sleep pattern and almost half 47.9% were satisfied with their energy levels to carry out their day-to-day activities. These findings are consistent with those of Alem et al. (1999) who found that *Khat* chewing is associated with increased energy levels and ability to receive information when taken in moderation. The findings further concurs with George et al. (1995) who reported that chewing in small amounts produces subjective effects such as increased energy levels and ability to communicate.

Hypotheses testing was deemed important to ascertain the relationships between independent and dependent study variables. Simple linear regression was utilized because it is the most basic and commonly used for predictive analysis. The first null hypothesis was:
H_{01} There is no relationship between *Khat* consumption and consumers' lack of sleep.

The variable used to measure *Khat* consumption was hours spent chewing, while lack of sleep is one of the of physical wellbeing aspects. The model summary is presented next.

Table 4.11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.111	.012	.011	.965	.012	7.213	1	581	.007

Source: SPSS Regression Output

Table 4.11 shows the model summary and overall fit statistics. The adjusted R^2 model is =0 .011 with the R^2 =0.012 this means that the linear regression explains 1.2% of the variance in the data. The analysis of variance results are presented on Table 4.12.

Table 4.12: Analysis of Variance Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	6.714	1	6.714	7.213	.007
Residual	540.813	581	.931		
Total	547.527	582			

Source: SPSS Regression Output

Regression analysis generates an equation to describe the relationship between one or more predictor variable. The P-value for each term tests the null hypothesis that the coefficient is equal to zero (no effect). A low P-value (< 0.005) indicates that the null hypothesis was rejected. The predictor that has a low p-value is likely to be a meaningful addition to the model because changes in the predictor's value are related to changes in the response variable. From the output in Table 4.12 the predictor variable is not significant because the p-value is 0.007, which is lesser than the common alpha level of 0.05. This means that the null hypothesis was accepted thus, there is no relationship between *Khat* consumption and consumer's' lack of sleep.

The finding is inconsistent with the result reported by Doughlas, Boyler and Lintzeris (2011) who found that *Khat* consumption was associated with lack of sleep. This shows that *Khat* consumption is not associated with lack of sleep.

Summary of findings

The third objective was to determine the effects of *Khat* consumption on the physical health of consumers' families. The study also showed that slightly more than two fifths 41.7% were satisfied with their ability to make decisions after consuming *Khat.* Further, over one third 37.2% of the respondents were satisfied with their sleep patterns and over two fifths 47.9% were satisfied with their energy levels to carry out their day-to-day activities. The results also indicated that slightly almost half 49.1% of the respondents did not have much difficulties in performing their routine activities due to *Khat* consumption. Simple linear regression analysis showed that there was no significant relationship between *Khat* consumption and consumers' lack of sleep.

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