ADDIS ABABA UNIVERSITY

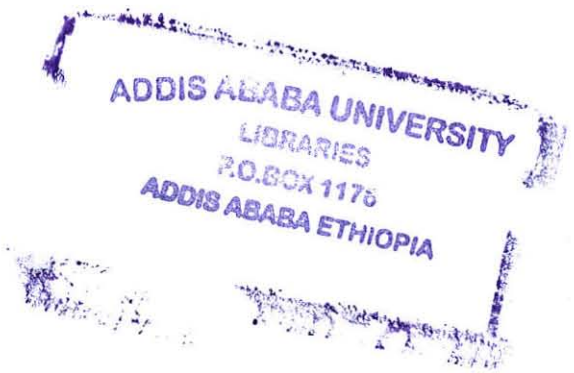
SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF DEVELOPMENTAL PSYCHOLOGY

THE INTERRELATIONSHIP AMONG HEALTH-RELATED BEHAVIORS, HEALTH CONSCIOUSNESS AND PSYCHOLOGICAL WELL-BEING AMONG THE ACADEMIC STAFF MEMBERS OF JIMMA UNIVERSITY

By

AREGASH HASSEN



JUNE, 2010

THE INTERRELATIONSHIP AMONG HEALTH-RELATED BEHAVIORS, HEALTH CONSCIOUSNESS AND PSYCHOLOGICAL WELL-BEING AMONG THE ACADEMIC STAFF MEMBERS OF JIMMA UNIVERSITY

By

AREGASH HASSEN

A Thesis Submitted to the School of Graduate Studies Addis Ababa University in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Developmental Psychology

JUNE, 2010

Acknowledgement

My deepest gratitude goes to my advisor Dr. Belay Tefera whose invaluable advices; critical comments and constructive suggestions were the major factors for the completion of this study. I believe that this study would have been impossible without his unreserved dedication and encouragement.

My special thanks and limitless appreciation also goes to many of my friends and individuals who put their fingerprint directly or indirectly in the course of this study.

Table of Contents

CHAPTER THREE

CHAPTER FOUR

CHAPTER FIVE

CHAPTER SIX

List of Tables

Page

Acronyms

WHO - World Health Organization

PWB - Psychological Well-Being

SPWB - Scales of Psychological Well-Being

CVD -Cardio-vascular Diseases

COPD- Chronic Obstructive Pulmonary Disease

Abstract

The purpose of this study was to examine the interrelationship among health consciousness, health-related behaviors and psychological well-being in adulthood at Jimma University. The study aimed also at exploring the interaction of health-related behavior, health consciousness and psychological well-being of the participants at Jimma University. The participants who took part in the study were 110 Jimma University academic staff. The instrument used for data collection was structured questionnaire and scales. To analyze and systemize the data descriptive (average, percents and standard deviations), and multiple regression and partial correlation analysis were used. The findings of this study revealed that most participants had proper health-related behavior, pay attention for their health and have high sense of psychological well-being. A positive significant correlation was found between health-related behavior and psychological well-being, and health-related behavior was significant independent predictor of psychological well-being. Generally, the finding of this study indicated, how far health-related behavior and health consciousness influence optimal functioning and development at one's true and highest potential of adults. Further in-depth researches are needed in the area.

CHAPTER ONE

1. INTRODUCTION

1.1 Background

Psychological well-being is not just a matter of luck. People can live rich, meaning-full, and vital lives by pursuing some health-related behaviors and refraining from others.

According to Ryff (1989, p.1071), psychological well-being is a multidimensional construct that taps six separate aspects. These are autonomy: a sense of self-determination and the ability to resist social pressures; personal growth: developing one's potential by growing and expanding as a person; self acceptance: holding positive attitudes about one self despite the awareness of one's limitations; positive relationship: warm and trusting interpersonal ties; environmental mastery: one's ability to modify their environment in order to meet personal needs and preferences; and purpose in life: finding meaning in ones efforts and challenges. That is, psychological well-being deals with human potential, the individuals optimal functioning and development at one's true and highest potential.

Individuals' psychological well-being: ability to live life full-with vitality and meaning; and his/her optimal functioning and development at one's true and highest potential highly influenced by the individuals' choices for life(life style factors, such as health-related behaviors) (Insel&Roth,2006). That is, in many cases, health-related behavior can tip the balance to ward good physical, mental and social well-being, even when heredity or environment is a negative factor and vice –versa. Individual choices for life can enhance or jeopardize his/her optimal functioning and development at one's true and highest potential (Spruijt-Metz, 1999).

Health-related behavior is any overt behavior or personal attribute that either enhance or damaging physical, psychological and social well-being now and in the future.

Health–related behaviors can be "health behaviors" and "risk behaviors". Both "health behavior" and "risk behaviors" health-related behavior include many lists of habits, such as diet, tobacco and alcohol use, coping strategies, physical activity, safe sex, safety and security precautions and so on(Spruijt_Metz, 1999). These behaviors can have important implications on the psychological well-being and health consciousness of the individual both positively and negatively.

The other concept treated in this study is health consciousness-to what extent the individual is concerned about his/her health. According to Insel& Roth(2006) health consciousness: refers to the individual's knowledge; to what extent the individual involved and alert to changes in his/her health; and know that one's health is depend on how well the individual take care of him/her self.

Directly or indirectly health-related behaviors, health consciousness and psychological well-being interact each other continuously influencing and being influenced by one another. Making a change in one, affect the other two. For instance, having good psychological well-being; such as having purpose in life, autonomy, personal growth and quality ties with others contribute to the overall functioning of the individual as well as may help the individual to became health conscious and may exercise healthy health–related behaviors or to change unhealthy life style factors. Similarly health-related behaviors have a significant influence on psychological well-being either by enhancing or diminishing. In addition as the individuals concerned about their health, have a great sense of control over his/her life, a feeling of empowerment, higher self-esteem, easily adapt to changes in life and function with his/her highest

potential. Similarly, health conscious individual may be likely to eat and sleep sensibly, get enough exercise, avoid substance abuse and get necessary medical care. To sum up psychological well-being is not built on empty nest. It is built on the individual's today's decisions about how to live his/her life; and to what extent the individual concerned about and involved in his/her health. In other words, the person's health-related behaviors and level of health consciousness have a profound influence on the individual optimal functioning and development at one's true and highest potentials.

Research has been established the positive association education with health enhancing behavior practices, high level of involvement in health and high sense of psychological well-being. Education linked to better material circumstances, practice of healthier behaviors, higher social capital, improved access to information and health promoting resources and greater psychological well-being. Furthermore, research on the outcomes of education, suggests that learning can develop a number of psychological qualities including self confidence, self-efficacy, self-understanding, competences, communication skills, civic engagement and a sense of belonging to a social group. These psychological outcomes of education may promote positive attitudes, cognitive abilities, and life circumstances that are conducive to practice positive health-related behaviors, have information about health and to function well (Ross&Wu, 1995).

Generally speaking, better-educated individuals are more likely to access information about health; to practice health protective behaviors and live life fully- with vitality and meaning. However some research findings (e.g. Anderson, et.al. 2007; Fekadu, Alem&Hanlon, 2007; Gelaw&Haile-Amlak, 2004) and practical observation indicated that better-educated individuals engaged in health-risking behaviors. For instance, contrary to popular beliefs that link idleness and less educated with khat

consumption, a survey carried out in Addis Ababa's hub for khat consumption; found that a significant number of khat consumers are employed(52.8%) and 59.4% have attained higher education(Mohamed, cited in Anderson,et.al.,2007, pp.27).

Developmental psychologists devoted their energy on the nature of human development from conception the point in time in which life begins until death the point in time when life ends. That is, to enrich knowledge and uncover developmental mysteries throughout the life span, developmental psychologists exhaustively explored many crucial developmental issues at different developmental stages. It is obvious that, because of their easily accessibility, every developmental issues have repeatedly studied or explored during childhood; adolescent time and old age. However, the longest and the most productive period of the life cycle has not enjoyed as much hot and fundamental discussions in different developmental issues as developmental issues in other developmental stages. The trend is true in the case of health-related behaviors, health consciousness and psychological well-being during adulthood. The situation is worst in Ethiopia.

The role of Health-related behavior and health consciousness on psychological well-being is crucial issue at any developmental stage. However because of the existing general belief that adulthood is the period that free from health risking habits and more likely concerned about their health, the topic has not enjoyed as much hot and fundamental discussion as health-related behavior and psychological well-being in adolescents' health-related behavior and psychological well-being research.

Generally, research has been adequately conducted in the area of health-related behaviors; psychological well-being and other related concepts in adulthood in the western developmental setting. Even though adulthood

represents the longest and the most productive period of the life cycle, systematically or unknowingly ignored, specifically in relation to health-related behavior and other related concepts in Ethiopia. Even if, most attempts dwell on digging out the prevalence of some common health risking health-related behaviors, like cigarette smoking alcohol consumption and khat chewing and psychosocial problems it brought. It seems no attempt on the role of health-related behavior on psychological well- being and other related concepts.

Therefore, this study tried to analyze the role of health-related behavior and health consciousness on psychological well-being of adults. Doing this might help to promote those healthy life styles to enhance the person's well-being and good health status and to prohibit those unhealthy habits that destroy the person's life.

1.2. Statement of the Problem

Scientific research is continuously revealing new connections between individuals' health-related behaviors and physical, mental and psychosocial well-being. What one eats or drinks, or how much sleep or anything that a person does has a profound influence on the level of his/her ability to live life full-with vitality and meaning.

Individuals' gene, age, and other factors that may be beyond the individual control contribute not more than 20% -30% for optimal functioning of the person. On the other hand, 70%-80% of the person's highest potential functioning largely determined by the decision the individual make about how to live his/her life (Perls, as cited in Babao & Moscoso, 2008, pp 4).

Though bulk of literature in the western, reveal that adults with high educational level and better socio-economic status engage in health enhancing habits, however, few studies that dwell on some common health risking habits in adulthood indicated that many of them engage in health risking behaviors in Ethiopia (Anderson, et.al. 2007; Fekadu, Alem&Hanlon, 2007; Gelaw&Haile-Amlak, 2004).

Although a few studies have been attempted in Ethiopia that focus on identifying some common health risking habits and what psychological problems these habits brought on the participants, it seems that no attempt has been made so far to investigate the role of health –related behaviors and health consciousness on psychological well-being. Moreover, the writer of this paper has been a member of teaching staff at Jimma University and observes and had discussion with some staff members about teachers' health-related behavior practices and health consciousness. This condition initiated the researcher to raise questions in her mind concerning the staff's health-related behaviors and health consciousness, and how far the teachers' health-related behaviors and their health consciousness influence their psychological well-being. Keeping these points in mind, the present study analyzed the role of health-related behaviors and health consciousness on psychological well-being in adulthood.

This study, as its major objective, focuses on providing appropriate insights and useful information about the interrelationship among health-related behaviors, health consciousness and psychological well-being in adulthood. Specifically, the study attempted to answer the following basic research questions.

1. What is the status of health-related behavior, health consciousness and psychological well-being of the participants?
2. How do health-related behavior, health consciousness and psychological well-being interact among themselves?
3. Is psychological well-being significantly affected by health-related behaviors, or health consciousness, or both?

1.3 Operational Definitions

Health-related behaviors: these are health-related habits, practices and activities or personal attributes that either enhance or put at risk the overall functioning of the participants.

Psychological well-being: refers to the participants meaning full engagement in life, self- realization or participants optimal psychological functioning and development at one's true highest potential. It asserts six dimensions. That is, autonomy, environmental mastery, personal growth, positive relationship with others, purpose in life and self acceptance of the participants.

- **Autonomy:** indicates participants' capacity to be self-determining and independent, even if it means going against conventional wisdom.
- **Environmental mastery**: refers to participants' capacity to manage everyday life and create a surrounding context that fits with personal needs and values.
- **Purpose in life**: refers to the participants' sense of direction in life and seeing meaning in one's present and past life.

- **Personal growth**: refers to participants' feelings of continued development, views the self as growing and expanding, and is open to new experiences.
- **Positive relationship with others**: means the participants' interpersonal well-being-having close, satisfying ties to others.
- **Self acceptance**: refers to participants' positive attitudes towards the self and acknowledges and accepts her/his good and bad qualities.
- **Health consciousness**: refers to what extent participants are concerned, involved and interested in information about their health.

1.4 Scope

Research on health-related behavior and psychological well-being requires a wide scale study on different groups, levels and areas of the country. But in order to the study to be more manageable, its scope is delimited to Jimma university and included better-educated groups only and the samples are homogeneous, the sample also delimited to 110 sample of participants. Furthermore variables included also delimited to exploring the role of health-related behaviors and health consciousness on psychological well-being.

1.5 Significance

It can be easily understood that the concept health-related behaviors, health consciousness and psychological well-being is a crucial issue for all of us.

Many researchers are giving more attention on identifying the prevalence of health risking habits such as khat chewing, cigarette smoking and alcohol consumption and health consciousness of participants in specific

cases, such as HIV/AIDs and how such problems can be minimized. Participants of most researches are adolescents.

In many research areas, the period adulthood systematically or unknowingly ignored especially in relation to health-related behavior and psychological well-being. If there an attempt it didn't go beyond identifying the prevalence of some health risking habits and the psychosocial problems it brought.

Therefore it is essential to assess the influence of health-related behavior and health consciousness on psychological well-being of better educated group adults which is model for other members of the society and the longest and the most productive life cycle of the life span.

In general, the finding of this study might help to:

- Determine the status of better-educated adult's health-related behavior, health consciousness and psychological well-being.
- Show the interaction of the three variables
- To know which one is(health-related behavior or health consciousness) significantly influence psychological well-being of participants.

Moreover it is the stepping stone for other interested researchers to conduct further research in the area on different levels, groups and large heterogeneous participants by including other variables.

CHAPTER TWO

LITERATURE REVIEW

Throughout this chapter the three concepts used in this research are exhaustively discussed. These are health, health-related behaviors and psychological well being. First, the chapter begins with on exploration of the term "health". Next, a thorough discussion is held on the concept health-related behaviors. With specific focus on such basic health-related behaviors as smoking, diet, physical activity, alcohol consumption, safe sex practice and khat chewing habits. Finally attempts are made to explore "psychological well-being" in meaning, dimensions and health and psychological well-being.

2.1 Health and Health-Related Behaviors

2.1.1 Meaning of Health

The concept of health is highly subjective. Different scholars in different disciplines address it in different ways. Some said health is mental representation that guides people's response to symptoms and various kinds of health threats. These mental representations vary from cultural to culture or discipline to discipline and provide a base for the wide variety of ways in which people indifferent cultures or discipline respond to health and other related events (Corrner, 2001).

For instance for anthropologists, the concept health and related practices are part of most complexities of social existence permeating the domains of politics, economics and religion and almost always connected with dimensions that go beyond the body, such as interpersonal, family and community relationships (Corrner, 2001; Insell & Roth, 2006).

On the other hand, from epidemiological conception, health is assessed in terms of rates of mortality and morbidity in human populations. That is, it only focuses on "disease, illness, and negative concepts" not rates of wellness and positive functioning (Lee, 1999).

More comprehensive and positive views were provided from the psychological view point. Explicit, efforts have been done to move the concept of health beyond medical and disease models of health. Such attempts include measuring multi dimensional aspects of functioning (physical, mental and social as well as quality of life including life satisfaction, morale, happiness and self-esteem) (Ryff & Keyes, 1995). Here, the psychological view of health, conceptualizes health in terms of positive functioning of different components of health. It is beyond the symptoms of disease.

Despite the plethora of theoretical and empirical activity, the weight of physical and non-physical components in defining health in a comprehensive way continues to be debated (Suls & Rittenhouse, 1987). However some conceptual changes take place in defining health particularly in health perspectives.

Recent health researches and literature see health in salutogenic approach. According to this approach, health is not only the mere absence of illness. Rather, it is a dynamic process and change that resulted from interaction of different interrelated factors. According to Insel & Roth, [2006], health is expressed in terms of six interrelated dimensions of health. These are physical, emotional, intellectual, spiritual, interpersonal and social, and environmental/planetary health. These dimensions of health interact continuously, influencing and being influenced by one another.

Eventhough views remain divided and consensus is limited the world health organization (WHO, 1986) defined in more comprehensive way. WHO, defined health as a "state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

To conclude, in spite of the existing disagreements over the definition of health, many of them tried to include biological, psychological, socio-cultural, spiritual and environmental components.

This implies that, since the concept health is highly subjective and influenced by different factors, a given person can rate his or her health according to his or her biological functioning, socio-cultural values, psychological perception and considering other factors.

2.1.2 Health- Related Behaviors in Adulthood

It is obvious that genetics determine the propensity for developing a number of chronic and age-related diseases (obesity, hypercholesterolemia, and hypertension), however, the occurrence and extent of these diseases are determined by health-related behavior choices. People can, however, slow or speed up the process with in genetic limits by adopting healthy or unhealthy life styles. According to Perls, as cited in Babao & Moscoso, 2008, p 4) genes determine 20% to 30% of individual's life expectancy. In contrast 70% to 80% of life expectancy of the individual depends on individual's health related behaviors.

Here, what one eats or drinks, or how much sleep or anything that a person does has a profound influence on health. Health related behaviors (life style factors) have the greatest influence on the individual's health that will make or break a person (Babao & Moscoso, 2008; Brunswick & Messeri, 1995; Papalia et.al, 2004).

Health related behavior can be divided into two categories: health behavior (or preventive health behaviors and risk behavior (or health risk behavior) (Glanz, et.al, 2002 & Spruijt-Metz, 1999). Health behaviors (such as exercise) are expected to enhance health and risk behaviors (such as smoking, alcohol consumption...) are expected to endanger health (Spruijt_Metz, 1999).

In defining health-related behavior, it is important to take in to consideration both health enhancing and impairing behaviors. Moreover the definition of health-related behaviors should incorporate of health from the charter of World Health Organization (1948).That is, health-related behaviors are behaviors that may affect physical health, mental health, and social- well–being or any combination thereof in both directions(Corrner, 2001& Spruijt-Metz, 1999). These behaviors are any health-related behaviors that influence individual's physical health, mental health and social well-being either by enchaining or destroying.

Therefore, heath-related behavior is any overt behavior or personal attribute that is considered to contribute to distal or proximal enhancement, maintenance and/or restoration of physical, mental, and social well-being and/or distal or proximal) disease prevention and vice-versa (Glanz,et.al, 2002).

Numerous studies have examined the relationship between health-related behaviors and health outcomes. According to Breslow & Breslow, 1994 cited tin Papalia,et.al, 2004 in a longitudinal study of 700 adults 20 to 70 years; health was directly related to common habits. After ten or more years people who did not follow healthy life styles were twice as likely to be disabled as people who most followed healthy habits.

During adulthood many diseases are age and work related and preventable. These includes cardio vascular diseases (C.V.D), coronary health diabetes, mellitus, hypertension, osteoporosis other sclerosis, stroke, arthritics, musculoskeletal disorders and some forms of cancer (Papalia, et.al, 2004; Cavanaugh & Blanchard-Fields, 2002, Suls & Rittenhouse, 1987; Bird & Rieker, 2008).

Health related behavior have a great impact up on individuals' quality of life by delaying the onset of such diseases and disorders and extending activities of life span and vice-versa.

Different studies (e.g. Corrner, 2001; Bird & Ricker, 2008) identified different key health related behaviors that need the individuals pursing and refraining in order to secure good health. The following are some repeatedly identified key health-related behaviors:

Smoking: Smoking is health related-behavior most closely linked with long term negative health outcomes. Smoking is preventable cause of morbidity and mortality from coronary health disease, lung cancer, cardio vascular disease and chronic obstructive pulmonary disease (COPD) (Bird & Rieker, 2008 and WHO, 2002a). Smoking cigarette became the leading behavioral causes of preventable premature death in adulthood throughout the world.

Worldwide 1.1 billion or one third of adults use tobacco products (primarily cigarettes) and not less than half of all persistent smokers. An estimated 4 million die annually as consequence [International Agency for Cancer Research, 2002 WHO, 2002b) cited in (Papalia, et. al. 2004 p. 567).

Thought the existing studies in Ethiopia focuses on youths and risk populations and indicates its increasing rate, some studies on adults (Kebede, 2002; Zein, 1998) also indicated cigarette smoking is at increasing rate and even started in adulthood. For instance, Kebede (2002) in his study on university teachers found that 28.2% of them were reported as life time, smokers and 13.3% of them reported as current user of cigarette.

Alcohol Consumption: Alcohol is a central nervous system depressant that in light amounts can have a relaxing effect. Although there is some debate over the health benefits of small amounts of alcohol consumed regularly, the negative health effects of excessive alcohol use and abuse are well established (Bird & Ricker, 2008).

Alcohol has long and short term effects on the users. According to Papalia et.al.(2004), heavy drinking over the years may lead to cirrhosis of the liver, gastro intestinal disorders, including ulcers, pancreatic disease, certain cancers, heart failure, stroke, damage to the nervous system, psychosis and other medical problems.

It goes without saying, that alcohol abuse also contribute for general physical weakness, injury, under-nutrition, sexually risk behaviors, poor work performance, accidents, suicides, crime, domestic violence, rape, murder and other psycho social problems (Fekadu, Alem & Hanlon, 2007; Corrner, 2001) .

The existing few studies conducted in Ethiopia on adult participants indicated alcohol abuse became major health and social problems. It is the most widely used substance in Ethiopia (e.g Alem, et.al, 1999, Kebede, et. al, 2005; Beyero, et.al, 2004) cited in (Fekadu, et.al, 2007).

Khat Use: Khat is the most recent plant based psycho-active substance to spread across global markets. It has traditionally been consumed in East Africa and Middle East (Anderson,et.al, 2007). There is a wide spread practice of chewing the leaves of khat among people living in Eastern Africa (namely, Ethiopia, Kenya, Somali) and southern Arabia (mainly Yemen).

Chewers report that khat gives them relaxation, increased energy levels, alertness, confidence, a sense of happiness, better thinking capacity and creativity, facilitation of communication ability, enhanced imaginative ability and capacity to associate ideas. However, over long periods of time chronic use of khat can lead to heavy levels of in toxication, which may trigger disorders. These include loss of appetite, mood swings feeling of anxiety, problems with sleeping, irritability and depression (Anderson,et.al, 2007; Fekadu et.al, 2007).

On the whole khat is depicted as a major cause for reckless and irresponsible behavior which further lead to other substance abuses, such as smoking and alcohol and involved in unsafe sex (Seblewongel, 2007). This condition affects the users' health and psychological well-being in the present and in the future.

Eating Habit: Eating habit play an important part in individual's health and well-being. The famous saying "you are what you eat" sum up the importance of nutrition for physical and mental health. What people eat, the pattern they follow and the meanings they attach to eating affects how they feel, look and get sick (Papalia, et.al,2004 ; Brannon, 2008).

Various eating behaviors are implicated in the health status of individuals. For example over eating leads to obesity, under eating

(anorexia) and in appropriate eating (bulimia) (Stunckard, cited in Simmons, 1989).

Under nutrition resulted in loss of muscle strength, impaired immunity, predisposing to infections as well as specific conditions resulting from a deficiency of micronutrients, such as Zinc, predisposing to lethargy, weakness and delayed wound healing (Coon, 2004).

On the other hand over nutrition causes and aggravate many chronic and age related diseases. Energy intake in excess of requirements resulted in obesity. Being overweight (Obesity) can lead emotional problems as well as it carries risk of high blood pressure, heart disease, stroke, diabetes, gall stones and some cancers and diminishes quality of life (Bird, & Rieker, 2007). Obese people have 30 to 50 percent more chronic medical problems than smokers or problem drinkers cause (Cavanaugh & Blanchard-Fields, 2002).

Generally eating habits can affect our health in promoting or destroying and accordingly the person eating habit contribute for the general well-being of the individual positively or negatively. Therefore, eating habit can be considered as one of health-related behavior that has both positive and negative implication on health.

Physical Activity: Physical activity promotes health, psychological well-being and a healthy body weight; enhances independent living and improves one's quality of life (Yeung & Hemsley, 1997). Adults who are physically active cultivate many benefits. Not only in maintain desirable slenderness, in addition physical activity builds, muscles, strengthens, heart and lungs, lowers blood pressures, protects against heart disease, strike, diabetes, cancer and Osteoporosis (Bird & Rieker, 2007); relieves anxiety and depression (Yeung & Hemsley, 1997) and lengthens life (WHO, 2002a).

There is over whelming scientific evidence, highlighting the health, social and psychological benefits with an active life style. However, physical activity remains the most underutilized low cost health resources in the world (WHO, 2009). A sedentary life style is a global public health problem. It is one of the world's ten leading cause of death and disability (WHO, 2002a).

Health Screening Habits: having medical checkup habits help the individual to detect disease at an early or asymptomatic stage. In spite of the countries' economic development, screening programs may be set up for various diseases including anemia, diabetes, bronchitis, cervical cancer, breast cancer and so on. Participating in health screening habits can reduce mortality up to 40% in adulthood. However, participation in health screening programs is generally varies across countries and very low in developing countries (Cornner, 2001; MOH, 2003/2004).

Sexual Behaviors: sexual behaviors are considered as health-related behaviors because of their impact up on the spread of sexually transmitted diseases (STDs), such us gonorrhea, HIV and others.

Sexuality is an important part of adult life. If it is healthy, it can be sources of pleasurable experiences and emotions and an important part of intimate partnerships; if not it has many potential consequences including unwanted pregnancy, disease and social stigma (Insel & Roth, 2006; Kebede, et.al, 2005).

To sum up, what the person employs as life style plays an important part on the person's level of ability to live life full-with vitality and meaning. Therefore, it is reasonable to study health-related behaviors of better-educated individuals to what extent they influence their optimal functioning.

2.2. Psychological Well-Being

2.2.1. Meaning

The concept psychological well-being is so vague concept that it still is debated as to the components it has, what it is and who has it. Staring from the time of Aristotle, philosophers engaged in articulating the components of human flourishing. They have offered multiple meanings of what constitutes the good life, such as the pursuit of human perfection, or the satisfying of human needs and desires (Ryff, Singer & Love, 2004).

For instance, Aristotle wrote about eudiamonia which reflects living the good life via the realization of one's daimon or true potential (Ryff, Cited in Ryff, Snger & Love 2004, p.1384).

Empirical research on well-being was launched in the 1960s via an interest in depicting the quality of life of Americans (Ryff & Singer, 1998). However, the discipline of psychology has long been interested in what constitutes positive psychology (psychological well-being). For example William James articulated a vision of "health-mindedness", Carl Jung wrote about coming to individuation self-realization and coming to self hood, Abraham Maslow offered detailed descriptions of what it means to be self-actualized, Erick Erickson depicted age-graded tasks and the way they are successfully negotiated, Godron Allport put forth a conception of maturity, Carl Rogers characterized the fully functioning precession and Marie Jahoda proposed multiple criteria of positive mental health to enumerate positive components of mental health, in contrast to the prevailing construal's of mental health as the absence of the negative (e.g. depression, anxiety) (cited in Keyes, Shmotkin & Ryff, 2002; Sharf,2000).

Different researchers conceptualized psychological well-being indifferent way but in similar pattern. Some simply stressed on feeling of life satisfaction, components of life quality, pleasure (including happy emotion and engagement (interest and flow) (e.g.Shmotkin). On the other hand, those from a humanistic tradition (e.g. Carol Ryff) include variables (such as, feelings of competence, autonomy, growth, social connectedness and purpose in life), in their definition of psychological well-being.

Earlier, psychological health literature has typically focused on the negative side of psychological functioning (Ryff& Singer, 2002). That is previous research concerning psychological health has suggested that people are mentally healthy, if they do not suffer from negative psychological symptoms (Ryff, 1995). The definition of psychological health, however, should not be limited to the absences of psychological maladies. That is, Psychological health is not merely the lack of an array of positive aspects such as positive effect, purpose in life, sclf acceptance and social contributions (Ryan, Huta & Deci, 2008).

Current research on well-being guided by two general perspectives. The hedonic approach that defines well-being in terms of pleasure and happiness (subjective well-being) and the eudiamonic approach, which focuses on self-realization, personal expressiveness and the degree to which people are able to actualize their abilities (Ryff, cited in Ryan& Deci; 2001)

Hedonic psychological well-being reflects the view that well-being consists of maximizing subjective happiness and experiencing pleasure (Ryan & Deci, 2001). Hence in order to maximize hedonic well-being people should do what makes them happy. Measures of hedonic well-being almost always center on the distinction between positive and negative affect and evaluation of life satisfaction.

On the other hand, according to Ryff, [1989b) eudiamonic well-being reflects optimal psychological functioning of the individual at his/her highest potential. Psychological well-being deals with human potential, the individuals' optimal functioning and development at one's true and highest potential. It entails perception of engagement with existential challenges of lives. It examines perceived thriving vis-à-vis the existential challenges of life, pursuing meaningful goals, growing, developing as a person, establishing quality ties to others (keys, Shmotkin & Ryff, 2002). It emphasizes objective and positive psychological health rather than psychological maladies (illness) and maximizing happiness and positive affect that are often associated with things such as selfishness and materialism (Ryff, 1995).

On the whole, the above literature reveals that, there is conceptual debate over the concept of psychological well-being. However, for the purpose of this study, the researcher follow the path of eudiamonic psychological well-being that conceptualize psychological well-being as the person's growth, development and optimal functioning at one's true and highest potential.

2.2.2 Dimensions of Psychological Well-Being

Ryff (1989b), a leading researcher on eudaimonic well-being challenges the hedonistic view of well-being and depicts eudaimonic well-being as distinct from hedonic happiness. Her conception of psychological well-being was based on the work of developmental, clinical and humanistic psychologists (E.g Erickson, Maslow, Rogers, Jung and Jahoda) and reflects optimal psychological functioning at one's highest potential.

Ryff (1989b) conceptualizes psychological well-being as multi-dimensional construct. Her theory of psychological well-being asserts that the attainment of well-being taps six separate aspects of

psychological well-being (autonomy, environmental mastery, personal growth, positive relationship; purpose in life and self acceptance).

1. Autonomy: refers to self-determination and independence. Rather than succumbing to social pressures, or looking to others for approval, autonomous individuals regulate their behavior and thoughts from within as well as evaluate themselves by their own standards.

2. Environmental Mastery: reflects having the capacity to effectively manage one's surroundings, including having a sense of control over complex external activities and the ability to choose or create contexts suitable to personal needs and values.

3. Personal Growth: individuals with a feeling of continued growth and development possess personal growth. This includes being open to new experiences as well as realizing one's potential and seeking improvements in one's self.

4. Positive Relatedness: includes warm and trusting interpersonal ties to others, being concerned about welfare of others, capable of strong empathy, affections and intimacy, understanding give and take of human relationship.

5. Purpose in Life: refers to having goals in life and a sense of directedness, feels there is meaning to present and past life; hold belief that give life purpose, have aim and objective for living.

6. Self Acceptance: reflects having positive attitudes towards oneself, as well as acknowledging and accepting multiple aspects of the self including both good and bad qualities.

2.3 Psychological Well-Being and Health

Defining human health as more than the absence of illness has been a long standing (WHO, 1948). One route to advancing health, construed as the presence of wellness, is to focus on what it means to flourish, such as having a sense of purpose and direction in life, good quality relationship with others and opportunities to realize one's potential (Ryff & Singer, 1998).

Well-being is a potential parameter of overall health. Well-being may be a precondition growth motives, it may support one's activities and motivation, improve sociability and open-mindedness, increase one's problem solving capacity, support a positive view of the world, help to accept one self and have a positive on health and health perception (Ryff & Singer, 1998).

The experience of psychological well-being such as having purpose in life autonomy, personal growth and quality of ties with others contribute to the effective functioning of multiple biological systems, which keep the person from succumbing to disease or when illness or adversity occurs, help to promote rapid recovery.

In addition, having a good psychological well-being help the individual to became health conscious and help to exercise healthy health-related behavior and to drop unhealthy life style factors (Ryff, Singer & Love, 2004).

The extant researches revealed that strong correlation between health and psychological well-being exist for self-reported health measures and somehow for objective health ratings by physicians (Insell & Roth, 2006).

To mention some, Ryff, (2009) showed that high positive affect (measured interns of general feelings, happiness, joy, contentment, excitement, and enthusiasm) predicts reduced health symptoms and pain as well as lower morbidity and increased longevity.

Furthermore, findings from MIDUS, show that among the educationally disadvantaged, those who have persistently high psychological well-being (Purpose in life, autonomy, Positive relationship with others) report better health, measured in terms of subjective health, chronic conditions, and symptoms (Ryff, Singer & Love, 2004). In addition a research conducted on old women, women with higher levels of purpose in life, personal growth and positive relations with others, showed lower cardiovascular risk, lower weight and better neuroendocrine regulation (Ryff & Singer, 2002).

In other research Ryff & Singer (2008) found that having high levels of purpose growth, and quality ties to others, etc part of what keeps people healthy even in the face of challenge. On the other hand poor relationship with others related to cardiovascular diseases, rapid decrease in cognitive functions; depression and increased practice of risk health behaviors (Ryff, 2009).

Furthermore Kahn, Hessling & Russel (2003) indicated that psychological well-being as expressed by measures of stress, depression, loneliness and Ryff &Singer (2008) poor relationship with others and fail to attain goal has great impact on individual's health.

In addition people who report a high level of social support (Kahn, Hessling & Russel, 2003), refrain from risky behaviors (Sprujt-Metz, 1999) and engaged in physical activity (Yeung & Hemsely, 1997) enjoy enhanced health and psychological well-being.

Well-being serve as a butter or protective factor against the negative effects of adverse experiences on biology and health (Ryff, singer & Love 2001); similarly, psychological well-being help individuals to practical health enhancing behaviors (e.g. Those experiencing self-realization may take better care of themselves by refraining from some health destructive behaviors) and engage in health enhancing behaviors like regular physical activity, leisure time activity, sports, control their diet and became more conscious about their health (Ryff & Singer, 2008).

Research evidences indicated that health-related behaviors have a significant influence on psychological well-being either by enhancing or diminishing (lowering). To have some, a research conducted on psychological well-being of Thai drug users by Tuicomepee & Romano(2005) that measured in terms of purpose in life, life satisfaction, life goals and happiness the results showed the participants have a low level of psychological well-being. In a similar vein Insel & Roth, (2006), in their book "Core Concepts In Health" put the following comprehensive concepts, how our health habit affect our health and general well-being. According to them, true general wellness [the ability to live life fully with vitality and meaning] largely determined by the decisions the individual make how to live his/her life. No matter what the individual age, gender, socio-economic status, the individual can optimize his/her well-being in each six interrelated dimensions of psychological well-being. The only thing that largely determined the individual's wellness and health the habit he/she makes today.

The six dimensions of well-being interact continuously influencing and being influenced by one another. Making a change in one dimension often affects some or all of the others. For example regular exercise, employing good eating habit and free from drug improve [the physical

dimension of well-being] can increase feelings of well-being and self esteem (emotional well-being) which in turn can increase feelings of confidence in social interactions (positive relatedness) and his/her achievements at work or school improved. Finally his/her success at work or school helps the individual to adapt him/her self easily with the environmental (existing physical and other interrelated environmental situations).

To conclude health and psychological well-being are interrelated, one is a parameter for the other. One may service as buffer for the other one. What people make choices (life style choices) such as exercise, diet, smoking and drinking have a great influence on health and psychological well-being? According to the decisions and habit of the individual, these life style factors either improve or destroy health status and psychological well-being of the individual.

2.4 Local Studies

In Ethiopia studies on health-related behaviors and health consciousness in adulthood are scare and if any delimited to investigating the prevalence of some common health risking behaviors and the effect it brought on participants. Moreover, might be due to the assumption that better-educated and adult populations are health conscious and practice health enhancing health-related behaviors, generally, it seems no local study on this research area.

2.5. Summary and Implication

The concept health is highly subjective and still a debated concept, what elements should be included to define in a more comprehensive way. Different scholars in different fields conceptualize in different angles. For instance scholars from salutogenic perspective conceptualize health in

six interrelated dimension of health. Generally research literature on health concept tried to include many components of health and take in to consideration the individual strength.

Recent researches and literatures on health suggested that individual's health is highly dependent on habits he/she develops and the decisions she/he made every day. Different researchers identified different health-related behaviors that are highly influential on the individual's health and general wellness. Most frequently identified includes smoking, diet, alcohol consumption, drug use, physical activity and others.

Psychological well-being is a broad concept that also suffers conceptual disagreement from different angles of studies as health. Recent in-depth studies define psychological well-being as a positive mental health that shows the individual optimal functioning and development at one's true and highest potentials.

Psychological well-being is multidimensional construct that taps six interrelated aspects of psychological well-being. These are autonomy, environmental mastery, and personal growth, purpose in life, positive relatedness and self acceptance.

Therefore, it is paramount to study the role of health-related behavior and health consciousness on psychological well-being of better-educated adults in order to understand the concepts in advance. Moreover, investigating this concepts, implicated in further researches in the area.

CHAPTER THREE

3. METHODs

3.1 Data Sources

3.1.1 Population

This study was conducted in the western part of the country specifically in Jimma Town, which is about 335km far from Addis Ababa. Since adults are found in different organizations, and in order to access adequate sample of better-educated adults and the researcher of this study was familiar, Jimma University was selected as research setting.

The population consisted of a total of 990 teachers (82 Females and 908 males) currently working at Jimma University. However, the target population of this study was that academic staffs who are currently working in the University; and those who have left the University for further education were not included.

3.1.2 Sample

Among 990 teachers, 255 have left Jimma for education abroad and to Addis Ababa University. Therefore, out of the remaining 735(675male&60female) teachers, 15 % (110(101male & 9female)) of them were taken as participants of this study. Table 1 represents the distribution of the population and sample by faculty and gender. In order to ensure a fair representation, representative samples were selected by stratified random sampling technique. The stratification was based on gender and faculty.

Table 1: Distribution of accessed population of teachers in Jimma University by faculty, gender and sample considered.

Faculty/college	**population**			**sample**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
Public Health and Medical Sciences	200	27	227	30	4	34
Business and Economics	67	5	72	10	1	11
Social Sciences and Law	167	6	173	25	1	26
Engineering Sciences	114	7	121	17	1	18
Agriculture and Veterinary Medicine	67	7	74	10	1	11
Natural Sciences	60	8	68	9	1	10
Total	675	60	735	101	9	110

3.2. Instruments

Data were collected using a questionnaire having four parts. The first part consists of variables, such as name of faculty, qualification, work experience, gender and age. The second part intended to measure health-related behaviors which include about drug free behavior, medical checkup, stress management, safety and safe sex, physical activity, and food concern habits. In this part, 23 items rating type with three scales (ranging from "most of the time" (or 3 points) to" never" (or 1 point)) were included. Questions presented in the third part were intended to measure psychological well-being in terms of six dimensions-autonomy, environmental mastery, self-acceptance, purpose in life, personal growth and positive relationship with others. Ryff & Keyes (1995) psychological-well being scale was used which originally developed by Ryff (1989b&1991). It consisted of 48 rating type items that ranges from1 (strongly disagree) to 5(strongly agree). Finally, the fourth part consisted

of questions that are supposed to measure health consciousness of the participants. A true false 20 items were included.

3.3 Procedures

3.3.1 Construction

1. Health-Related Behavior

Based on the literature review, a 23 items questionnaire was constructed to gather data about teachers' health-related behaviors. The questionnaire items were constructed in the form of three point rating type ranging from "most of the time" (or 3 points) to" never" (or 1 point). The questionnaire has seven sub parts.

2. Health Consciousness

To measure health consciousness 20 items were assembled from the available literature. The response to the statements is "True" or 'False". The statements were intended to measure to what extent the participants were concerned about their health and to what extent the statements are true or false for them concerning their health consciousness.

3. Psychological Well-Being

With a little modification so as to fit the culture of the participants of this study, the scales of psychological well-being (sPWB, Ryff & Keyes, 1995) was used to assess psychological well-being of the participants. Ryff's scales of psychological well-being consist of 84 items. It is self-reported instrument that comprised of six sub scales, each having 14-items sub scale assessing unique dimensions of psychological well-being. However, the number of items used in this study was reduced by half from the original Ryff's scales of psychological well-being. Because there are many

(about 17) statements have very close and similar meaning (e.g. I like most parts of my personality and I like most aspects of my personality; some were discarded based on expertise evaluation(4items) and after pilot study(5 items)and others are somehow culture sensitive and somehow difficult to understand. Participants responded to each item using a five point likert scale ranging from 1(strongly disagree) to 5(strongly agree). Responses to negatively-worded items were reversed for scoring procedures. Responses consisted of statements such as "My decisions are not usually influenced by what everyone else is doing." And "I am good at managing the responsibilities of daily life."

3.3.2 Validation

A. Expert Judgment

In order to establish content validity the developed and adopted statements were judged by 8 professionals or graduate students from psychology department. 29 questions for health-related behaviors, 57 questions for psychological well-being and 19 questions for health consciousness were developed and the questionnaire distributed to the eight experts. The experts were asked to give their replies under the alternatives 'relevant', 'irrelevant', and 'remake'. In addition, they were asked to give their comments with regard to items to be included, irrelevant items and over emphasized areas. Based on the result of the experts rating, in the case of health-related behaviors, among 29 rating type questions four of them were discarded and two of them were modified. Similarly in the case of psychological well-being, among 57 rating type questions four of them were canceled out and finally in the case of health consciousness all questions were approved and the experts suggested to modified some items and furthermore to include some relevant questions.

Therefore, 25 questions for health-related behaviors, 53 questions for psychological well-being and 22 questions for health consciousness were employed for the pilot test.

B. Pilot study

Pilot study was conducted in order to improve clarity of items, determine time needed for administration and also check the reliability of the scales.

The data for the pilot study was collected from 27 randomly selected post graduate students in Addis Ababa University. After the data collection Chronbach alpha-item reliability of the health-related behavior, psychological well-being and health consciousness items were computed to check reliability of the items.

Out of 25 health-related behavior measuring items 2 items which has less contribution to the final correlation were eliminated. Similarly, out of 53 psychological well-being scales 5 items were discarded. Finally, in the case of health consciousness, from the total 22 items, 2 of them were eliminated. In all cases the elimination and modification was done based on item total correlation results. Items with less than 0 .15 item total correlation either modified or dropped.

Table 2. Reliability Indices

Variables	Cronbach's alpha	No. of items
Health-related behavior	0.77	25
Health consciousness	0.82	22
Psychological well-being	0.74	55

Finally 23, 48 and 20 items were employed to measure health-related behaviors, psychological well-being and health consciousness respectively for the final study.

3.3.3 Administration

In order to ensure the success of this study, the following instrument administration procedures were followed:

- Three 3rd year students were selected from Jimma University as assistant researchers. Their roles were to assist the researcher during the time of distribution and collection of the questionnaire to and from the participants.
- Orientation about the purpose of the study was given for research assistants to make clear the written directions.
- Before the distribution of the questionnaire, respondents were briefed orally about the purpose of the study.
- The instruments were administered with the help of the research assistants.
- The instruments were filled and returned within two weeks and collected by research assistants and the researcher herself.

3.3.4 Data Analysis

The following statistical tools were used to analyze the data gathered.

1. Descriptive statistics was used to determine either favorable or unfavorable teachers' status in health–related behavior, health consciousness self-rated health status and psychological well-being.
2. Pearson correlation was used to test whether or not health-related behavior and health consciousness with psychological well-being and correlated among each other. In addition, Pearson correlation

was also used to determine the correlation of aspects of psychological well-being with health-related behavior and health consciousness

3. Regression analysis was employed to examine whether health-related behaviors or health consciousness have influence on psychological well-being of the participants.
4. Partial correlation analysis was carried out separately for health-related behaviors and health consciousness to see which one is more influenced psychological well-being.

CHAPTER FOUR

4. Results

In the presentation and analysis section, the focus is to display and systematically analyze the respondents' response. Accordingly, descriptive statistics, correlation, regression and partial correlation analysis were employed to analyze respondents' response. This section mainly integrated by using tables. Analyses are presented in three sections. In the first section, distribution of participants by faculty, qualification and work experience are presented by using frequencies and percents. Second, to determine the status of participants at each variable descriptive statistics was used. Third interrelation among, health-related behavior, health consciousness, psychological well being and aspects of psychological well-being are presented. Finally, regression and partial correlation analysis done to determine which variable is play important role on psychological well-being of participants.

4.1. Background Characteristics of Participants

As respondents' background characteristics faculty, qualification, teaching experiences, and gender of participants were analyzed by using descriptive statistics. Out of 110 participants, 34(31%) from Public and Medical Sciences,, 26(24%) from Social Sciences and Law, 18(16%) from Engineering Sciences, 11(10%) for each, from Business And Economics and Agriculture and Veterinary Medicine And the rest 10(9%) were taken from Natural Sciences. In relation to qualification, 45(41%), 60(55%) and 5(4%) have BA, MA and PhD respectively. Majority of participants 66(60%) have 1-5 years of teaching experiences and the rest 28(25%) and 16(15%) of participants have 6-10 and >11 years of teaching experiences respectively. as table 2 display, out of 110, 101(92%) and 9(8%) were male and female respectively. Finally, in relation to age, the

minimum and maximum was 20 and 54 with mean 31.86 and 7.88 standard deviation. See Table 2.

Table 3. Some Background Characteristics of Respondents

Characteristics		Frequency	Percent
Respondents by Faculty	Public Health and Medical Sciences	34	31
	Business and Economics	11	10
	Social Sciences and Law	26	24
	Engineering Sciences	18	16
	Agriculture and Veterinary Medicine	11	10
	Natural Sciences	10	9
	Total	110	100
Participants By Qualification	BA	45	41
	MA	60	55
	PhD	5	4
	Total	110	100
Participants By Teaching Experiences	1-5	66	60
	6-10	28	25
	>11	16	15
	Total	110	100
Gender	Female	9	8
	Male	101	92
	Total	110	100

Age of participants			
Minimum	Maximum	Mean	Std. deviation
20	54	31.86	7.88

4.2 Status of Participants on each Variables and Sub-Variables

Table.4. Status of Participants at Each Variables and Sub-variables (N=110)

	Variables	No. of items	Mean	Standard deviation	Remark
1. Health-related behavior	1. Drug free behavior	4	10.97	1.12	
	2. Medical check up	3	6.91	1.42	
	3. Stress management	4	9.52	1.48	
	4. Safety	3	7.66	1.24	
	5. Exercise	2	3.62	.99	
	6. Safe sex	2	5.34	1.01	
	7. Food concern	5	11.24	1.78	
	8. Total	23	55.25	5.11	
2. Health consciousness	Health consciousness	20	34.30	4.02	
3. Psychological well-being	4. Autonomy	8	28.64	4.78	
	5. Environmental mastery	8	28.78	3.750	
	6. Personal growth	8	30.85	4529	
	7. Positive relationship	8	29.79	5.41	
	8. Purpose in life	8	29.31	3.677	
	9. Self acceptance	8	31.25	3.76	
	Total	48	178.62	18.18	

The above table presents descriptive statistics of participants on each variable and sub-variables. These descriptive statistics explained by calculated mean, whether it is greater or less than the expected mean. In all variables, if calculated mean is below expected mean represents low score and if the calculated mean equal or above the expected mean, represents high score in each variable and sub-variables.

In relation to health-related behavior, the expected mean was 46 and the calculated mean is 55.25. This indicated that the participants follow healthy health-related behavior. To see in specific participants have drug free behavior, have good medical checkup habit, have positive stress management habit, have positive safety habits, practice safe sex and they are concerned about their food but have low score in exercise habits.

In the case of participants' health consciousness, the expected mean was 30 and the calculated mean is 34. This shows that participants are health consciousness (have knowledge and pay attention for their health).

In relation to psychological well-being mean of general psychological well-being and the six dimension of psychological well-being calculated. The calculated mean of general psychological well-being is 178.62. It is higher than the expected mean (144). Generally participants have high score in psychological well-being.

In order to determine status of participants' on specific health-related behaviors further specific descriptive analysis were done.

4.2.1 Drug Free Behavior

Table 5. Drug Free Behavior of Participants

Statements	Most of the time		Sometimes		Never	
	N	%	N	%	N	%
I smoke tobacco products (such as cigarettes, cigars or pipes).	3	2.7	5	4.5	102	92.7
I chew khat	1	.9	17	15.5	92	83.6
I consumed alcohol (such as beer, wine, katikala, teje, sprits)	4	3.4	60	54.5	46	41.8
I abuse drugs (prescription or illegal)	6	5.5	3	2.7	101	91.8
Mean total	4	3	21	19	85	78

As table shows, to measure drug free behavior four statements were used. 102(92.7%), 92(83.6%), 46(41. 8%) and 102(92%) never smoke, chew khat, consumed alcohol and abuse illegal drugs respectively. However, about 55% infrequently consume alcohol. Generally about 78% Of participants follow drug free behaviors and 22% participants follow non drug free behaviors.

4.2.2. Medical Checkup Habit

Table 6. Medical Checkup Habit of Participants

Statements	Most of the time		Sometimes		Never	
	N	%	N	%	N	%
When I receive advice or medication from a physician I follow up the advice and take the medications as prescribed	78	71	20	18	12	11
I read product labels and investigate their effectiveness before I buy any food products and medicines	50	45.5	50	45.5	10	9
I have regular medical checkups and seek medical advice when symptoms are present.	19	17	66	60	25	23
Mean total	49	45	45	41	16	14

Most of the time, 78(71%) and 50(45.5%), When they receive advice or medication from a physician they follow up the advice and take the medications as prescribed and read product labels and investigate their effectiveness before they buy any food products and medicines. In relation to the habit of having regular medical checkups and seeking medical advice when symptoms are present, about 60% of participants follow this habit infrequently.

4.2.3 Stress Management Habit

Table 7. Stress Management Habits of Participants

Statements	Most of the time		Sometimes		Never	
	N	%	N	%	N	%
I find time for family, friend, and things I especially enjoy.	34	31	63	57	13	12
I attempt to avoid stressful situations	50	45	58	53	2	2
I able to identify situations in daily life that cause stress	58	53	48	44	4	3

In relation to stress management habit 47(43%) and 57(52%) of participants employ those stress reducing habits such as finding time for family, friends, and things they especially enjoy, in attempting to avoid stressful situations, able to identify situations in daily life that cause stress and to identify situations in daily life that cause stress most of the time and sometimes respectively.

4.2.4. Safety Precautions

Table 8. Safety habits of participants

Statements	Most of the time		Sometimes		Never	
	N	%	N	%	N	%
I am care full to keep my hygiene	80	73	25	23	5	4
I avoid friends who engage in health risking habits	57	52	44	40	9	8
I avoid places that allow smoking and other illegal drugs	58	53	48	44	4	3
Mean total	65	59	39	36	6	5

80(73%) and25 (23%) care full to keep their hygiene, 57(52%) and 44(40%) avoid friends who engage in health risking habits and 58(53%) and48 (44%) avoid places that allow smoking and other illegal drugs

practice these safety precautions most of the time and sometimes respectively. Generally, about 59% of participants have positive safety habits.

4.2.5. Exercise Habits

Table 9. Exercise Habits of Participants

Statements	Most of the time		Sometimes		Never	
	N	%	N	%	N	%
I do vigorous activity that elevates my heart rate	7	6	60	55	43	39
I do exercise for flexibility, muscle fitness or weight control	16	14	72	66	22	20
Mean total	11	10	67	60	32	30

In relation to exercise habits majority of the participants follow inconsistent exercise habits. That is about 60% do exercises infrequently and about 30% totally have no exercise habits.

4.2.6 Safe Sex Habit

Table 10. Safe Sex Habits of participants

Statements	Most of the time		Sometimes		Never	
	N	%	N	%	N	%
I abstain from sex or limit sexual activity to a safe partner	78	71	21	19	11	10
I practice safe procedures for avoiding STD's	85	77	20	18	5	5
Mean total	82	74	21	18	8	7

Majority of the participants practice safe sex. That is about 74% most of the time practice safe sex and the rest 18% and 7% practice safe sex rarely and never respectively.

4.2. 7. Food Concern

Table 11. Food Concern Habits of Participants

Statements	Most of the time		Sometimes		Never	
	N	%	N	%	N	%
I consume only as many calories as I expend each day	17	15	82	75	11	10
I limit the amount of fats and cholesterol	28	26	62	56	20	18
I drink more water than soft drinks or any beverages	66	60	38	35	6	5
I eat my meal at the right time	45	41	62	56	3	3
I limit the amount of salt and sugar content	35	32	60	54	15	14
Mean total	38	35	61	55	11	10

In relation to food concern habit, about 55% of participants have inconsistent food concern habits. And the rest 35% strictly concerned about their food. For instance 60% and35% drink more water than soft drinks or any beverage most of the time and sometimes respectively, 32%and54%limit the amount of salt and sugar content in their food frequently and infrequently and41% eat their meal at the right time and 56% eat their meal rarely at the right time. And majority of the participants did not limit the amount of fats and cholesterol and pay less attention for calories consume each day.

4.2.8 Health Consciousness Status of Participants

The following table presents participants health consciousness. To measure participants' health consciousness 20 statements were included. The main intention was to know the attitude or knowledge of participants towards their health.

As table12 indicates for each measuring health consciousness statements, about 70%participants responded almost in all cases majority of the statements are as true of them. For instance 94(85%) of participants are alert to changes in their health and take preventive measures that keep their health for life. About 87%of participants were interested in information about health, and pay attention for their before they get sick. Furthermore, majority of participants 56%, 92% and 86% know that alcohol even in small amount, khat chewing and smoking are bad for health respectively and know those health enhancing habits such as exercise, paying attention for food and so on are important to keep health for life.

Table 12. Health Consciousness of Participants

	Statements	True		False	
		N	%	N	%
1	I am alert to changes in my health	94	85.5	16	14.5
2	I take responsibility for the state of my health	97	88	13	12
3	I only worry about my health when I get sick	43	39	67	616
4	I am interested in information about my health	96	87	14	13
5	To maintain a size figure, exercise is very important	104	95	5	5
6	I reflect a lot about my health	65	59	45	41
7	I am very self conscious about my health	75	68	35	32
8	I am generally attentive to my inner feelings about my health	81	74	29	26
9	I am constantly examining my health	44	40	66	60
10	I am careful about what I eat in order to keep my weight under control	41	37	69	63
11	My health depends on how well I take care of my self	88	80	22	20
12	Eating right, exercising, and taking preventive measures will keep my health for life	97	88	13	12
13	I am more health conscious than most of my friends	47	43	63	57
14	Smoking is bad for health	101	92	9	8
15	Alcohol consumption is bad for health even in small amount	62	56	48	44
16	Chewing khat is bad for health	95	86	15	14
17	Exercises help me succeed in all facets of my life	81	74	29	26
18	I am very involved in my health	71	65	39	35
19	Air pollution bothers me	83	76	26	24
20	I am concerned about the contents of the food I take	76	69	34	31
	Mean total	77	70	33	30

4.3 Interrelations Among Health Consciousness, Health-Related Behavior and Psychological Well-Being

Table 13. Inter correlation among Health consciousness, Health-related behavior and Psychological well-being.

Table 13 shows zero order correlations among health consciousness, health-related behavior and psychological well-being.

Variables	X1	X2
Health consciousness (X1)	1	
Health-related behavior (X2)	0.480**	
Psychological well-being (X3)	0.186	o.432**

P**< 0.01

As table13 shows a significant positive correlation was found between health consciousness and health-related behaviors. The variable psychological well-being positively correlated with health consciousness and health-related behavior and the correlation between health-related behavior and Psychological well-being was significant.

Table 14. Results of regression analysis beta weights and multiple

Correlation coefficients for predicting Psychological well-being participants

Predictor variables	Standardized beta weight and dependent variable(Psychological well-being)
Health consciousness	0.028
Health-related behavior	0.445
Over all R2	0.187

As indicated in table 14 health-related behavior was significant independent predictor of Psychological well-being of participants, but

health consciousness was not. Overall the entire model accounted for 18.7% of the variance in the Psychological well-being of the participants (2,108) =12.307, P<0.05.

4.3.1 Partial Correlation Analysis Investigating the Role of Health-Related Behavior and Health Consciousness as Predictor of Psychological well-being of Participants

A. Partial Correlation Dealing With The Role Of Health-Related Behavior On Psychological Well-Being Of Participants

Table 15. Partial Coefficients Associated with the Relationship between Health-Related Behavior and Psychological Well-Being of participants. Controlling for Health Consciousness.

Variables correlated	Partial correlation
Health-related behavior and Psychological well-being (X3)	0.398

P*<0.05

The partial correlation between health-related behavior and psychological well-being was found statistically significant when the other variable health consciousness was controlled. F (1,109) =24.744, P<0.05.

B. Partial Correlation Dealing with the Role of Health-consciousness on Psychological Well-Being of Participants

Table 16. Partial Coefficients Associated with the Relationship between Health consciousness and Psychological Well-Being of Participants. Controlling for Health-Related Behavior.

Variables correlated	Partial correlation
Health consciousness (X1) and Psychological well-being (X3)	-0.027

P*>0.05

Table 16 indicates that when health-related behavior is controlled, the partial correlation between health consciousness and psychological well-being becomes statistically not significant.

CHAPTER FIVE

5. DISCUSSION

This study explored the role of health consciousness and health-related behavior on psychological well-being. The central tenet of this study was to display the status of participants on health consciousness, health-related behaviors and psychological well being and to determine interaction among each other.

The findings of this study revealed that most of participants who are included in this study have positive health-related behavior, have positive health concern and have high sense of psychological well-being. Moreover in each sub-variable of health-related behaviors and the six dimensions of psychological well-being participants also had favorable scores.

5.1 Health-Related Behaviors Health Consciousness and psychological well-being Status of Participants

In this section the status of participants on each variables are and sub variables discussed in brief.

5.1.1 Health-Related Behaviors and Health Consciousness

In relation to health-related behavior, participants of this study follow healthy health-related behaviors. To see in specific participants have drug free behavior, good medical checkup habit, positive stress management habit, positive safety habits, practice safe sex and somehow concerned about their food, but have inconsistent exercise habits.

Similarly, in the case of health consciousness, participants pay attention for their health, involved in their health and have favorable health-related knowledge.

5.1.2 Psychological Well-Being

In this study, participants have high sense of psychological well-being and are autonomous, easily adapt with their environment, have favorable purpose in life and personal growth, and have high sense of self acceptance and positive relationship with others.

5.2. Interrelation among Health Consciousness, Health-Related Behavior and Psychological Well-Being

Health consciousness and health-related behavior positively correlated with psychological well-being and significant correlation were found between health-related behavior and psychological well-being.

This positive correlation indicated that having a good sense of psychological well-being help the individual to became health conscious, and help to exercise health behavior and to drop unhealthy life style factors. Moreover the individual may perceive his/her health as in good condition. On the other hand, if the individual is health conscious, the person will adopt positive health-related behaviors, have high sense of psychological well-being and implicated on the individual's health status perception. Findings in this study are consistent with statements of Ryff (2009); Insel & Roth (2006); Yeung & Hemsely (1997); Ryff and Singer (2008); Kahn, Hessling& Russel(2003); Ryff, Singer & Love (2001). Generally, health- related behaviors and health-related concepts positively correlated with psychological well-being. That is, having high sense of psychological well-being, may serve as parameter of overall health and health-related habits. Having sense of psychological well-

being may be a precondition growth motives, it may support one's health–related activities and motivation, improve sociability and open-mindedness, increase one's problem solving capacity, support a positive view of positive health-related behaviors and health perception.

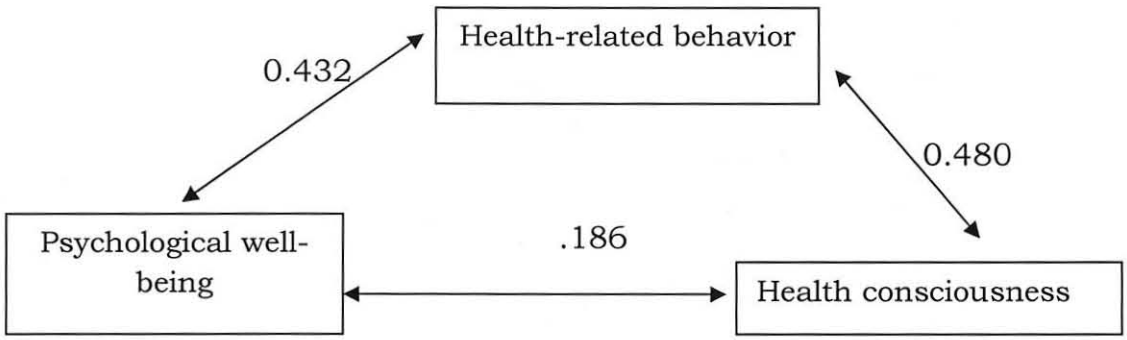


Fig.1 Conceptual Model Illustrating How Psychological Well-Being Inter Correlated with Health Consciousness and Health-Related Behavior.

Similarly, health- related concepts, that is, health consciousness and health-related behavior inter correlate each other positively and significantly. This significant positive inter correlation indicated that the people who have a positive heath-related behavior may be the individual is conscious about his/her health and may rate in positive way and have high sense of psychological well being.

A similar premise given by Ryff, Singer & Love (2001) and Ryff & Singer (2008) that psychological well-being serves as a protective or buffer factor against the negative influences of adverse experience on biology and health. Psychological well-being helps individuals to practice health enhancing behaviors, become health conscious and rate their health as in better condition.

5.3 Inter-Correlation of Health-Related Behavior with Six Dimensions of Psychological Well-Being

The significant positive correlation found between health-related behaviors with five dimension of psychological well being (autonomy, environmental mastery, personal growth, purpose in life and quality relationship with others); and positive insignificant correlation found between health-related behavior and one dimension of psychological well-being (self acceptance). The positive significant relation indicated that having health enhancing habits can increase the individual's autonomy, environmental mastery, personal growth, purpose in life, quality relationship with others and self acceptance. On the other hand a person who has high level of purpose in life, growth, autonomy, adaptation, quality ties to other and soon may employ healthy life styles. This finding goes in line with the statements of Yeung& Hemsely (1997) Spruijt-Metz (1999) and Ryff & Singer (2008).

5.4 Health-Related Behavior as the Predictor of Psychological Well-Being

In this study the role of health-related behavior in predicting the psychological well-being of the participants was examined independently and jointly with health consciousness. Results of multiple correlations and partial correlation analysis indicated that health-related behavior was most important variable in explaining the variation in psychological well- being of the participants. That means individuals who have healthy life styles significantly have high sense of psychological well-being. In other words individuals' health-related behavior play significant role in sense of psychological well-being-can optimally functions and develops at his/her true and highest potential at any situations. This finding goes in line with findings of Tuicomepee & Romano (2005) that, individuals who

use drugs have significant low level of psychological well-being. Similarly Insel and Roth (2006) put a similar premise that true general wellness [the ability to live life fully with vitality and meaning] largely determined by the decisions the individual make how to live his/her life. Therefore, what the individual employs as life style affects his/ her psychological well-being profoundly.

5.5. Health Consciousness as the Predictor of Psychological Well-Being

As it has been indicated in the inter-correlation, health consciousness of participants is positively related with psychological well-being of participants. From this one can conclude that as participants became health conscious as well they have high sense of psychological well-being. But results in the partial correlation analysis indicated that health consciousness of participants was not an independent predictor of the psychological well-being of participants when the variable health-related behavior statistically controlled. However, health consciousness may influence psychological well-being indirectly. That is, health-related behavior and health consciousness positively and significantly correlated, that health conscious individuals might practice healthy health-related behaviors that greatly influence the individuals' sense of psychological well-being.

All in all, participants of this study have favorable health-related behaviors, health consciousness and high sense of psychological well-being. A positive significant correlation found between health-related behavior and psychological well-being and in multiple regression analysis, health-related behavior is the most significant predictor of psychological well-being.

CHAPTER SIX

6. Summary, Conclusion and Recommendation

6.1. Summary

This study explored the interrelationship among health consciousness, health-related behavior and psychological well-being. Accordingly the following specific questions were entertained.

1. What is the status of health-related behavior, health consciousness and psychological well-being of the participants?
2. How do health-related behavior, health consciousness and psychological well-being interact among themselves?
3. Is psychological well-being significantly affected by health-related behaviors, or health consciousness, or both?

One hundred and ten (101 male and 9 female) Jimma University academic staff were included in the study as the source of data. The participants were drawn from each six faculty/college.

To collect the necessary data, two types of instruments namely questionnaire for background information and scales for health-related behavior, health consciousness and psychological well-being were used.

To analyze and systemize the data gathered descriptive statistics, Pearson correlation and regression partial correlation analysis were employed.

The general finding of the study is that health-related behaviors and health consciousness correlated with psychological well-being. And health-related behaviors significantly correlated with psychological well-being and were significant predictor of psychological well-being.

6.2. Conclusions

The specific conclusions of the study are the following:

1. Participants of this study have positive health-related behaviors but pay less attention for food and follow inactive life style and were health conscious.
2. A significant positive correlation found between Health-related behavior and psychological well-being.
3. Health consciousness and Health-related behavior positively and significantly correlated.
4. Health-related behavior is the most significant predictor of psychological well-being.

6.3. Recommendation

On the basis of the results that were obtained, the following recommendations are forwarded:

1. Even though, generally, participants have positive health-related behaviors and health conscious, there are some unfavorable life style factors, such as majority of participants rarely pay attention to their food, engage in physical activity rarely or never at all and sometime majority of them consume alcohol. Therefore, the institution may mobilize inclusive activities, such as sport clubs and matches for faculty staff and through that staff might pay attention to their food and refrain from those health risking habits.
2. This study is limited one institution and one group; therefore, further research should be conducted in-depth by covering large and heterogeneous groups and levels, and including different variables.

References

Abebaw Fekadu, Atalay Alem, and Hanlon, C. (2007). Alcohol and Drug Abuse in Ethiopia: Past, Present and Future. *African Journal of Drug and Alcohol Studies, 6(1), 435-442.*

Anderson,D., Beckerleg, S. Hailu, D. and Klein, A. (2007). *The Khat Controversy: Stimulating the Debate on Drugs.* New York: Berg Oxford.

Babao, A.J and Moscoso, L.S. (2008).Lifestyle and Health Status of Faculty of the college of Human Ecology and Food Sciences and the College of Education. Journal of the American Association 16[2], 25-34). Available at http://www.health trends.org/health status-owerive.aspx.

Bird, C.E. and Rieker, P.P. (2008*). Gender ad Health*: the Effects of Constrained Choices and Social Polices. Cambridge University Press.

Brannon, L. (2008). Gender: Psychological Perspective (5th eds). Pereasons sudnction, Inc,

Burnswick, A.F. and Messeri, P. (1985). Drugs, Lifestyle, and Health; A longitudinal study of Urban Black Youth. *Journal of American Public Health, 76(1),52-57.*

Cavanaugh, J.C and Blanchard-Fields, F. (2002). *Adult Development and Aging* (4th ed). Wadsworth / Thomson Learning, Inc. U.S.A

Coon,D.(2004). *Introduction to Psychology. Gateways to Mind and Behaviotr(*10th ed.). Thomson Wadsworth.

Cornner, M. (2001).Health Behavior: Psychological Theories. In. N.J. Smelser and Encyclopedia of the social and Behavioral sciences, 21, 1055-1085. Elsevier Science Ltd. UK Oxford.

Glanz, K. Rimer B.K. and Lewis, F.M. (2002). Health Behavior and Health Education; Theory, Research and practice (3rd eds). John Willey and Sons, Inc. San Francisco.

Insel, P. and Roth, W.T. (2006) Core Concepts in Health (10th ed.). McGraw. Hill

Kahn, J.H, Hessiling, R.M. and Russel, S.W. (2003). Social Support, Health, and Well-being among the Elderly: What is the Role of Negative Affectivity? *Journal of Personality and Individual Differences, 35, 5-17.*

Kebede,et.al.(2005).khat and alcohol use and risky sex behaviors among in school and out school youth in Ethiopia. *East African Medical Journal, 74,376-381.*

Keyes, C.L.M., Shmotkin, D. and Ryff, C.D. (2002). Optimizing Well-Being: The Emprical encounter of two traditions. *Journal of Personality and Social Psychology, 82(6), 1007-1022.*

Keyes,C.L.M.,Ryff,C.D. and Shmotkin,d.(2002). Optimizing Well-Being: The Empirical Encounter of Two Traditions. *Journal of Personality and Social Psychology,82(6),1007-1022.*

Ministry of Health Ethiopia (MOH, 2003/4).Health and Health-Related Indicators.

Papalia, D.C., Olds, S.W. and Feldman, R.D. (2004). *Human Development*(9th ed).McGraw-Hill, Inc.

Pudrouska, T. Springer, K.W and Hauser, R. (2005). Does Psychological Well-being change with age? Available at/ htt:// www.SSc, edu/wisresearch/.

Ross,C.E. and Wu,C.(1995). The links between education and health. *American Sociological Review 60(5),719-745.*

Ryan, R.M. and Deci, E.L. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-being. *Annual Review of Psychology, 52, 141-166.*

Ryan,R.M.,Huta,V.,& Deci,E.L.(2008). Living well: A self-determination theory Perspective on Eudaimonia. *Journal of Happiness Studies, 9,139-170.*

Ryff, C, D. and Singer, B. (1998). The Contours of Positive Human Health. Psychological Inquiry, 9(1), 1-28. Available at:http:// www.jstor .org/journals/kebstay/ lorfrans. Himl.

Ryff, C.D and Hedrich, S.M (1997). Experience and Well-Being: Explorations on Domains of life and How they Matter. *International Journal of Behavioral Development, 20(2), 1993-2006.*

Ryff, C.D and Singer, B.H (2008). Know Thyself and Became what you Are: A Eudaimonic Approach to psychological well-being. *Journal of Happiness studies, 9, 13-39.*

Ryff, C.D. (1995). Psychological Well-Being in Adult Life. *Current Direction in Science, 4, 99-104.*

Ryff, C.D. (2009). Well-being and Health: Probing the Connections. Available at www. midus.wisc.edu.

Ryff, C.D. and Singer, B.H (2002). From Social Structure to Biology: Integrative Science in pursuit of human health and Well-Being. In C.R. Synder and S.J.S. Loipez (eds.), Hand book of Positive Psychology. (541-555). Oxford University Press.

Ryff, C.D., Singer, B.H. and Love, G.D. (2004). Positive Health: Connecting Well Being with Biology. *The Royal Society. 359, 1383-1394.*

Ryff,C.D. and Keyes, C.L.M.(1995). The structure of psychological well-being revisited. *Journal of personality and social psychology,69,719-727.*

Ryff,C.D.(1989). Happiness is Everything or Is It? Exploration on the Meaning of Psychological Well-Being. *Journal of Personality and Social Psychology, 57(6),1069-1081.*

Seblewongel Lemma. (2007). Assessment of Risk Factors for Selected Chronic Diseases among Higher Education Students in Addis Ababa Unpublished MA thesis. Addis Ababa University.

Sharf, S.R. (2000).Theories of Psychotherapy and Counseling: Concepts and Cases.(2nd ed.) Wadsworth Brooks/Cole

Simmons, D.D (1989). Self-Reports of Eating Behavior, Goals, Imagery and Health Status: Principal Components and Sex Differences. *The Journal of Psychology Interdisciplinary and Applied, 121(1), 57-60.*

Spruijt-Metz,D.(1999). *Adolescence, affect and health: studies in adolescent development.* Psychology press Ltd, Tylor & Francis group, UK.

Suls, J. and Rittenhouse, J.D. (1987). Personality and Physical Health. *Journal of Personality, 55(2), 155 -167.*

Tuicomepee, A. and Romano, J.L (2005) Psychological Well-Being of Thai-Drug users Implication for Prevention. *Journal for the Advancement of Counseling, 27(3), 431-444.*

Uskul, A.K and Greenglass, E. (2005). Psychological Well-Being in a Turkish Canadian Sample. *Journal of Anxiety, stress, and Coping, 18(3), 269-278.*

World Health Organization (1986) Health Research Strategy for Health for all by the year 2000. WHO, Geneva

World Health organization (2002a) Physical Inactivity a Leading Cause of Disease and Disability. Retrieved Nov. 24, 2009, from http://www.who int/media centre/news/releases/release 23/en/print. htm.

World Health Organization (2008), Physical Activity. Retrieved No. 24, 2009 from htt://www who.int/ diet physical activity/ publications/ facts/ palen/print.htm/

Yeshigeta Gelaw, and Abreham Haile-Amlak, (2004). Khat chewing and its Socio-Demographic Correlates among the staff of Jimma University. *Ethiopian Journal of Health Development, 18(3), 180-184.*

Yeung, R.R. and Hemsley, D.R.(1997). Personality Exercise and Psychological Well-being: Static Relationships in Community. *Journal of Personality and Individual Differences, 22(1-6), 47-65.*

Yigzaw Kebede. (2002). Cigarette Smoking and Khat Chewing Among University Instructor in Ethiopia. *East African Medical Journal, 79(5), 274-278.*

Appendix A

Addis Ababa University

Department of Psychology

Developmental Psychology Masters Program

Questionnaire to be filled by University Academic Staff

Dear respondents,

The objective of this questionnaire is to collect information about your health-related behaviors, your psychological well-being and other related concepts.

The information you provide will determine the outcomes and implication of the study. Therefore, we would like strongly appreciate for all honest, confident and objective responses. At the outset, we would like to assure you that your response will be used only for research purposes and kept confidential.

Please, note that you are not required to write your name.

I am most grateful for your cooperation!

Part one: Background Information

Direction: Please respond the following questions by making a tick mark (√) or in writing where necessary.

1. Name of the faculty /school----------
2. Academic qualification

☐ BA/BSC/BED/LLB MA/MSC/LLM/MPH ☐ Ph.D/MD/DDM/DVM

☐ Other (please specify) _____

3. Teaching experience in terms of service years _____

4. Sex ☐ Female ☐ Male

5. Age_____

Part Two: Health-Related Behavioral Factors

Direction: This section seeks to assess your health-related behaviors. Accordingly, some possible statements are listed in the following table. Please read each item separately and respond as always, sometimes and never, based on your response by putting a tick mark (√) in the respective spaces.

No	Statements	Most of the time	Sometimes	Never
1	I smoke tobacco products (such as cigarettes, cigars or pipes).			
2	I chew khat			
3	I consume alcohol (such as beer, wine, katikala, tege, sprits)			
4	I abuse drugs (prescription or illegal)			
5	When I receive advice or medication from a physician I follow up the advice and take the medications as prescribed			
6	I read product labels and investigate their effectiveness before I buy any food products and medicines			
7	I have regular medical checkups and seek medical advice when symptoms are present.			
8	I find time for family, friend, and things I especially enjoy.			
9	I attempt to avoid stressful situations			
10	I am able to identify situations in daily life that cause stress			
11	I am care full to keep my hygiene			
12	I avoid friends who engage in health risking habits			
13	I avoid places that allow smoking and other illegal drugs			
14	I get an adequate amount of sleep each night			
15	I do vigorous activity that elevates my heartbeat rate			
16	I do exercise for flexibility, muscle fitness or weight control			
17	I abstain from sex or limit sexual activity to a safe partner			
18	I practice safe procedures for avoiding STD's			
19	I consume only as many calories as I expend each day			
20	I limit the amount of fat and cholesterol			
21	I drink more water than soft drinks or any beverages			
22	I eat my meals at the right time			
23	I limit the amount of salt and sugar content			

Part Three: Psychological Well-Being Scale

Direction: Please read each of the following items carefully; thinking about how it relates to your life, and then indicate the level of agreement that best describes your present feeling about you and your life. Use the following scale to respond.

5. Strongly agree (SA) 4.Agree (A) 3. Undecided (UD) 2. Disagree (D) 1. Strongly disagree (SD)

	Statements	5 SA	4 A	3 UD	2 D	1 SD
	My decisions are not usually influenced by what everyone else is doing.					
	I have confidence in my opinions even if they are contrary to the general consensus.					
	I tend to worry about what other people think of me.					
	I often change my mind about decisions if my friends or family disagree.					
	Being happy with myself is more important to me than having others approve of me					
	It's difficult for me to voice my opinion on controversial matters.					
	I tend to be influenced by people with strong opinion					
	I judge myself by what I think is important not by what others think is important					
	I am good at juggling my time so that I can fit everything in that needs to get done.					
0	I am good at managing the responsibilities of my daily life.					
1	I do not fit very well with the people and community around me.					
2	I have difficulty arranging my life in a way that is satisfying to me.					
3	I have been able to create a lifestyle for myself that is much to my liking.					
4	I generally do a good job of taking care of my personal finance and affairs.					
5	In general, I feel I am in charge of the situation in which I live.					
6	The demands of everyday life often get me down					
7	I am not interested in activities that will expand my horizontals					
8	I have the sense that is having developed a lot as a person over time.					
9	When I think about it I haven't really improved much as a person over the years.					
0	I think it is important to have new experiences that challenge how I think about me and the world.					
1	I don't want to try new ways of doing things my life is fine the way it is					
2	I do not enjoy being in new situation that require me to change my old familiar ways of doing things.					
	For me, life has been a continuous process of learning, changing & growing					

		5 SA	4 A	3 UD	2 D	1 SD
	I gave up trying to make big improvements or changes in my life a long time ago.					
;	I don't have many people who want to listen when I need to talk.					
,	I enjoy personal and mutual conversations with family members and friends.					
7	I often feel lonely because I have few close friends with whom to share my concern					
3	It seems to me that most other people have more friends than I do.					
9	People would describe me as a giving person, willing to share my time with others.					
)	I know I can trust my friends and they know they can trust me.					
i	Maintaining close relationship has been difficult and frustrating for me.					
?	I have not experienced many warm and trusting relationship with others					
3	I enjoy making plans for the future and working to make them a reality					
4	My daily activities often seem trivial and unimportant to me.					
5	I am an active person in carrying out the plans I set for my self					
6	I don't have a good sense of what it is I am trying to accomplish in life.					
7	I sometimes feel as if I have done all there is to do in life.					
8	I used to set goals for myself but that now seems like a waste of time					
9	Some people wander aimlessly through life but I am not one of them.					
0	I live life one day at a time and don't really think about the future.					
1	I feel like many of the people I know have gotten more out of life than I have.					
2	In general I feel confident and positive about my self					
3	When I compare myself to friends and acquaintances it makes me feel good about who I am.					
4	My attitude about myself is probably not as positive as most people feel about themselves.					
5	I made some mistakes in the past, but I feel that all in all everything has worked out for me best.					
6	In many ways, I feel disappointed about my achievement in life.					
7	When I look at the story of my life, I am pleased with how things have turned out.					
8	I like most aspects of my personality					

Part Four: Health Consciousness

Direction: The following statements intended to measure people's health consciousness (concern) and related concepts. Indicate whether the statement are characteristics and descriptive of you by putting tick mark (√) under **True** if the statement is some what or very true of your self. Put tick mark (√) under **False** if the statement is some what or very false of your self.

		True	False
1	I am alert to changes in my health		
2	I take responsibility for the state of my health		
3	I only worry about my health when I get sick		
4	I am interested in information about my health		
5	To maintain a size figure, exercise is very important		
6	I reflect a lot about my health		
7	I am very self conscious about my health		
8	I am generally attentive to my inner feelings about my health		
9	I am constantly examining my health		
10	I am careful about what I eat in order to keep my weight under control		
11	My health depends on how well I take care of my self		
12	Eating right, exercising, and taking preventive measures will keep my health for life		
13	I am more health conscious than most of my friends		
14	Smoking is bad for health		
15	Alcohol consumption is bad for health even in small amount		
16	Chewing khat is bad for health		
17	Exercises help me succeed in all facets of my life		
18	I am very involved in my health		
19	Air pollution bother me		
20	I am concerned about the contents of the food I take		

THANK YOU!!

Appendix B

Addis Ababa University

Faculty of Education

Department of Psychology

Developmental Psychology Masters Program

Questionnaire evaluated by expertise

Dear evaluators (expertise)

The objective of questionnaire is to collect information about adult health-related behaviors (such as smoking, alcohol consumption, physical activity, diet khat changing and other habits) and psychological well-being of the participants in terms of six dimensions.

Generally the questionnaire has three parts.

You are required to evaluate each part accordingly, based on operational definitions of variables, whether each statement are relevant or irrelevant to measure what each statement purports to measure.

Your evaluations determine the appropriateness of each statement to measure the intended objective. In addition it helps the researcher to add other relevant items and to avoid those repeated and irrelevant items.

Thus, please be honest, careful and committed while evaluating each statement I am most grateful for your cooperation.

Operational Definitions

1. **Health related behaviors**: refers to any overt behavior or personal attribute that considered contributing to distal or proximal enhancement, maintenance/restoration of physical, mental and social well-being and/or distal or proximal) disease prevention and vice-versa.

That is, health-related behaviors include both healthy behaviors, and risk health behaviors.

2. **Psychological well-being:** refers to the individuals' meaningful engagement in life and their self-realization. In other word, it refers to the individuals' optimal psychological functioning at highest potential that measured in six dimensions.

- **Autonomy:** which emphasizes the individual's capacity to be self-determining and independent, even if it means going against conventional wisdom?
- **Environmental masterly**: refers to the capacity to manage everyday life and create a surrounding context that fits with personal needs and values.
- **Purpose in life**: refers to the individual's sense of direction in life and seeing meaning in one's present and past life.
- **Personal growth**: refers to individual's feelings of continued development, views the self as growth and expanding, and is open to experiences.
- **Positive relationship with others**: Pertains the individual's interpersonal well-being-having close, satisfying ties to others.
- **Self acceptance**: refers to the individual's positive attitudes towards the self and acknowledges and accepts her/his good and bad qualities.

3. **Health consciousness**: refers to what extent the individual is concerned about his/her health.
4. **Self rated health status**: refers to the person's self evaluations (perception) of his/her present health status.

Part One: Health Related behavioral factors

The following statements intended to measure health-related behaviors scale used Always, sometimes and never.

No	Statement	Relevant	Irrelevant	Remark
1	I smoke tobacco products (such as cigarettes, cigars or pipes).			
2	I have regular medical checkups and seek medical advice when symptoms are present			
3	When I receive advice or medication from a physician I follow up the advice and take the medications as prescribed.			
4	I read product labels and investigate their effectiveness before I buy any food products and medicines			
5	I chew khat			
6	I find time for family, friend, and things I especially enjoy friend, and things I especially enjoy doing			
7	I avoid friends who engage in health risking habits			
8	I am able to identify situations in daily life that cause stress			
9	I consumed alcohol (such as beer, wince katikala, tege, sprits) in small amount			
10	I engaged in binge drinking			
11	I attempt to avoid stressful situations			
12	I am able to identify situations in daily life that cause stress			
13	I abuse drugs (prescription or illegal)			
14	I smoke, abuse alcohol and chew khat			
15	My work involve vigorous intensity activity that cause large increase in breathing or heart rate			
16	I do vigorous activity that elevates my heart rate			
17	I do exercise for flexibility, muscle fitness or weight control			
18	I avoid places that allow smoking			
19	I do recreational/leisure time) activities (such as brisk working, cycling, swimming, volley ball) that cause a small increase in breathing or heart rate			
20	I walk to get to and from places			
21	I abstain from sex or limit sexual activity to a safe partner			
22	I practice safe procedures for avoiding STD's			
23	I eat regular meals each day			
24	I avoid unhealthy food intakes such as snacks, raw meat, etc			
25	I limit the amount of fats and cholesterol, salt and sugar content			
26	I drink more water than soft drinks or any beverages			
27	I eat my meal at the right time			
28	I eat additional food after supper and before going to bed			
29	I used a lot of low calorie or calorie reduced products			

Other comments _____

_____

_____

_____

Part Two: Psychological Well-Being Scale

The following statements intended to measure psychological well being in terms of six dimensions. The scale used 5: strongly agree 4 agree 3: can't decide 2: disagree 1: strongly disagree

Statements	Relevant	Irrelevant	Remark
Autonomy			
My decisions are not usually influenced by what everyone else is doing.			
I have confidence in my opinions even if they are contrary to the general consensus.			
I tend to worry about what other people think of me.			
I often change my mind about decisions if my friends or family disagree.			
I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.			
Being happy with myself is more important to me than having others approve of me			
It's difficult for me to voice my opinion on controversial matters.			
I tend to be influenced by people with strong opinion			
I judge myself by what I think is important not by what others think is important			
Environmental Mastery			
I am good at juggling my time so that I can fit everything in that needs to get done.			
I often feel overwhelmed by my responsibilities			
I am quite good at managing the responsibilities of my daily life.			
I am good at managing the responsibilities of daily life.			
I do not fit very well with the people and community around me.			
I have difficulty arranging my life in a way that is satisfying to me.			
I have been able to create a lifestyle for myself that is much to my liking.			

I generally do a good job of taking care of my personal finance and affairs.			
In general, I feel I am in charge of the situation in which I live.			
The demands of everyday life often get me down			
Personal Growth			
I am not interested in activities that will expand my horizontals			
I have the sense that is having developed a lot as a person over time.			
When I think about it I haven't really improved much as a person over the years.			
I think it is important to have new experiences that challenge how/think about me and the world.			
I don't want to try new ways of doing things my life is fine the way it is			
I do not enjoy being in new situation that require me to change my old familiar ways of doing things.			
There is truth to the saying you can't teach an old dog new tricks.			
For me, life has been a continuous process of learning, changing and growing			
I gave up trying to make big improvements or changes in my life a long time ago.			
Positive Relations			
I don't have many people who want to listen when I need to talk.			
I enjoy personal and mutual conversations with family members and friends.			
I often feel lonely because I have few close friends with whom to share my concern			
It seems to me that most other people have more friends than I do.			
People would describe me as a giving person, willing to share my time with others.			
Most people see me as loving and affectionate			
. know I can trust my friends and they know they can trust me.			
Maintaining close relationship has been difficult and frustrating for me.			
have not experienced many warm and trusting relationship with others			
urpose in Life			
enjoy making plans for the future and working to make them a reality			

My daily activities often seem trivial and unimportant to me.			
I am an active person in carrying out the plans I set for my self			
I tend to focus on the present because the future nearly always brings me problems			
I don't have a good sense of what it is I'm trying to accomplish in life.			
I sometimes feel as if I have done all there is to do in life.			
I used to set goals for myself but that now seems like a waste of time			
Some people wander aimlessly through life but I am not one of them.			
I live life one day at a time and don't really think about the future.			
Self-Acceptance			
I feel like many of the people I know have gotten more out of life than I have.			
In general I feel confident and positive about my self			
When I compare myself to friends and acquaintances it makes me feel good about who I am.			
My attitude about myself is probably not as positive as most people feel about themselves.			
I made some mistakes in the past, but I feel that all in all everything has worked out for me best.			
The past had it ups and downs but in general, I wouldn't want to change it.			
In many ways, I feel disappointed about my achievement in life.			
When I look at the story of my life, I am pleased with how things have turned out.			
I like most aspects of my personality			

The following statements intended to measure health consciousness, which just requires True or False response.

3.2. Health Consciousness

		Relevant	Irrelevant	Remark
1	I am alert to changes in my health			
2	I take responsibility for the state of my health			
3	I only worry about my health when I get sick			
4	I am interested in information about my health			
5	To maintain a size figure, exercise is very important			
6	I pay attention to my eating habits			
7	I reflect a lot about my health			
8	I'm very self conscious about my health			
9	I'm generally attentive to my inner feelings about my health			
10	I'm constantly examining my health			
11	I am careful about what I eat in order to keep my weight under control			
12	My health depends on how well I take care of my self			
13	Eating right, exercising, and taking preventive measures will keep my health for life			
14	I am more health conscious than most of my friends			
15	Smoking is bad for health			
16	Alcohol consumption bad for health even in small amount			
17	Chewing khat is bad for health			
18	I am concerned about my health all the time			
19	Exercises help me succeed in all facets of my life			

Other comments _____

_____

_____

THANK YOU!!!