**An-Najah National University Faculty of Graduate Studies** 



# The Level of Health Behaviors Among Palestinian University Students In West Bank

By Mahmoud Fathi Mahmoud Jaber

Supervised By Dr. Suleiman Al-Khalil

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This thesis was defended successfully on 22 –July- 2003 and approved by:

#### **Committee Members**

1- Dr. Suleiman Al-Khalil (Supervisor)

2- Dr. Samar Ghazal Musmar (Internal examiner)

3- Dr. Qasem AL-ma'ni (External examiner)

Signature

# Dedication

To My Beloved Parents and My

Wife

#### **ACKNOWLEDGMENTS**

It was by the support guidance of many individuals especially my great father and mother, who provided me with great opportunities, I am so grateful to them, and what ever I do will not ever thank them.

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#### **ABSTRACT**

This current study aims to recognize the health behavior of the Non-governmental Palestinian university students (An-Najah, Al-Quds, Bir-Zeit, Beathlehem and Arab-American university in Jenin) during the academic year 2001/2002 and the effect of variables Such as university, gender, the students' educational level, the students' cumulative average and parents' education on the level of health behavior.

For this purpose, the researcher has proposed a questionnaire based on the survey of instruments in the field of health awareness such as (1999).

The sample of the study, which was randomly chosen and personal interview –dependent, consisted of (1057) students (529) males and (528) females and formed (5%) of study population.

Finding of our study showed that the level of health behavior of the student on total score was moderate (67.4%).

Very high level of health behavior among students was only on smoking and alcohol domain (82%). The level of health behavior students was moderate on the following domain (nutrition (68.4%), managing stress (67.8%), and medical care (69.4%)).

The level of health behavior among students was very low only on physical fitness domain (49.8%).

The study showed that there were differences of statistical significance at the value ( $\alpha$ =0.05) among the variables are that the result revealed, according to the university variable. That all differences were in favor of Arab-American University.

Results, according to gender variables, showed that gender variable was, in all domains and total score between male and female students, in favor of female students, while in case of physical fitness domain it was in favor of male students.

The College variable between scientific and humanity college was in favor of scientific college.

Results also showed that all differences, according to cumulative average, were in favor of the higher cumulative average.

The variables of fathers' and mothers' educational level revealed that differences were in favor of the higher education.

(For fathers and mothers).

Recommendations of this study, according to what the Researcher found, are to teach obligatory courses that take into consideration health awareness among college students and conducting other studies adopting other variable the researcher didn't use.

#### 1.1 Introduction

Health education and awareness are virtually the most prominent and important fields of public health, they are also the best instruments and the most effective means in improving society health (Arab. M., 1987).

The interest in health education and awareness is harmonious with the look at education as it is a comprehensive instrument that is balanced for human being in the physical, mental and emotional sides.

The one's who are interested in education in general and in health education in particular agree on the importance of the role of school and university in achieving the goals of health education of students especially concerning health awareness and building attitudes, values, and styles of correct health behavior(Khateeb., et al., 1997).

However, (Salameh B., 1997) indicated that health awareness should be the ultimate goal of health education, as healthy lifestyle behaviors should be the resultant of health awareness.

College health professionals deal with a range of medical problems and risky behaviors. Some medical conditions occur more frequently in the college-age population, but college health is not unique because of the types of medical problems seen (Grace T.W., 1997).

Health education in colleges and universities offers an opportunity to reach a captive audience of young people in order to promote a lifetime of healthy behavior. According to the Centers for Disease Control and Prevention (CDC) (1997), " colleges and universities are important settings for delivering health promotion, education, and services to many young adults.

foster the development and maintenance of health education and health promotion programs because (a) the most common health issues faced by college students, such as fitness, alcohol use and sexuality, are related to lifestyle and personal behavior. (b) college students tend to be receptive to educational programs, including those addressing personal improvement (Boehm S., et al., 1993 and , Jensen M., et al., 1989); (c) the college or university is a defined community, making it conducive to establishing community norms and organizational policies that can improve health. (Zapka J.G., 1986).

#### 1.2 Health Behavior

Behavior can be defined as an action that has a specific frequency, duration, and purpose, whether conscious or unconscious.

Hubley (1993) defined health behavior as " actions that healthy people undertake themselves or others to promot health and prevent disease (e.g., exercise, good hygiene practices) and reduction of health-damaging behaviors (e.g., smoking, excessive alcohol consumption and accidents".

Human behaviors play an important role in the prevention, control, treatment and rehabilitation processes of most health problems. These behaviors may be based on decisions or are done regularly and have become habits or routines.

Healthy lifestyle is more than just eliminating harmful habits, it is a way of living. Your lifestyle can significantly decrease the risk of disease, while significantly increasing your chances of living healthfully throughout your life span. A healthy lifestyle is predicted on the idea that our chances for self-fulfillment are directly increased or decreased by our level of wellness (Hubley J., 1993).

Health behaviors are important not only in disease prevention and health promotion but also because they often represent habits. Every action we choose set into motion a behavior that may become habit. A health habit is a health-related behavior that is firmly established and often performed automatically, without thought. (Hunt, W.A., et al., 1979).

Some authors have argued that health behaviors are best viewed individually (e.g., Lipkus L.M., et al., 1994 and Wright., 1997). Particular health behaviors (e.g., smoking) may be important in their own right because they have been empirically related to health outcomes. As well, some key health behaviors show very low intercorrelations (e.g., smoking and seat belt use). Engaging in one health behavior is not necessarily associated with practicing particular other health behaviors, because different health behaviors may be maintained by different mechanisms. Finally, individual health behavior may be more amenable to specific interventions than health behavior clusters (Lipkus L.M., et al., 1994).

In contrast, other theorists argue that health behaviors can meaningfully be viewed in terms of clusters. Consider that some health behaviors do co-occur (Tapp J.T., and Goldenthal P.A., 1982 and Vickers R.R., et al., 1990).

Moreover, the advantages of viewing health behaviors as clusters include conceptual convenience, increased reliability of aggregate variables and increased comprehensiveness. Broader domain coverage may also yield higher validity for predicting general health outcomes.

Finally, the use of health behavior clusters may contribute to a conceptual framework for understanding the diverse empirical findings associated with independent health behaviors (Tapp J.T., and Goldenthal P.A., 1982 and Vickers R.R., et al., 1990).

## 1.3 Categories of Health Behavior: -

Health researchers distinguish a number of behaviors related to health and disease. Kolbe (1988) proposed nine categories of health behavior as shown in Table (1.1).

# Table (1.1)

# A typology of health behavior

	·		
Wellness	Any activity undertaken by an individual who believes himself/herself to		
Behavior	be healthy purpose of attaining an even greater level of health.		
Preventive	Any activity undertaken by an individual who believes himself/herself to		
Health	be healthy purpose of preventing illness or detecting it in an		
Behavior	asymptomatic state.		
At-Risk	Any activity undertaken by an individual who believes himself/herself to		
Behavior	be healthy but at greater risk than normal of developing a specific health		
	condition, for the purpose of preventing that condition or detecting it in		
	an asymptomatic state.		
Illness	Any activity undertaken by an individual who believes himself/herself to		
Behavior	be ill, to define the state of his/her health and to discover a suitable		
	remedy.		
Self-Care	Any activity undertaken by an individual who believes himself/herself to		
Behavior	be ill, for the purpose of getting well; includes minimal reliance on		
	appropriate therapists, involves few dependent behaviors, and leads to		
	little neglect of one's usual duties.		
Sick-Role	Any activity undertaken by an individual who believes himself/herself to		
Behavior	be ill, for the purpose of getting well; includes receiving treatment from		
	appropriate therapists, generally involves a whole range of dependent		
	behaviors, and leads to some degree of neglect of one's usual duties.		
Reproducti	Any activity undertaken by an individual to influence the occurrence or		
ve	normal continuation of pregnancy.		
Behavior			
Parenting	Any wellness, preventive, at-risk, illness, self-care, sick-role behavior		
Health	performed by an individual for the purpose of ensuring, maintaining, or		
Behavior	improving the health of a conceptus or child for whom the individual has		
	responsibility.		
Health-	Any activity undertaken by an individual singularly or in concert with		
Related	others (i.e., collectively) through organizational, legal, or economic		
Social	means, to influence the provision of medical services, the effects of the		
Behavior	environment, the effects of various products, or the effects of social		
	regulations that influence the health of populations.		
	1		

Kolbe's first six behaviors are related directly to an individual's personal health and the last three are related to the way an individual's behavior directly influences another person's health (Kolbe L.J., 1988).

#### 1.4 Review of Literature

The next section of this study provides an introductory detailed review of health behaviors among university and college students. The path to a high quality of life; or wellness lifestyle, lies in our behaviors. Our choices and subsequent actions make our lives what they are. John Seffrin, Executive Director of the American Cancer Society, has said, "The need to choose is the most constant aspect of human life. It constitutes our greatest asset and our heaviest burden (Roberts G.W., et al., 1997).

(Steptoe A., et al., 1994) note that health behaviors are activities undertaken by people in order to protect, promote or maintain health, and to prevent disease. The questions of whether a "healthy lifestyle" can be identified is of major concern for health researchers and practitioners. A healthy lifestyle implies consistent health-conscious behavior across a range of activities including dietary choice, substance use, exercise and preventive practices.

Knowledge about behavior-health links (or risk awareness) is an important factor in an informed choice concerning healthy life-style. For instance, the reduction of smoking over the past 20 years in the Western world can be attributed to the growing awareness of the serious health risks such as lung cancer posed by tobacco use (Steptoe A., and Wardle J., 1994).

Another factor linked with risk awareness is belief or attitude. Various studies have shown that the perceived advantages of certain health behaviors are associated with the actual practice of such behaviors (Cody R., and Lee C., 1990).

Colleges and universities offer programs, classes, workshops, and information to increase awareness and understanding of health risk behaviors among their students.

Many studies showed the importance of health issues and health education courses among university students in developing or changing their healthy lifestyle behaviors. So, knowledge of healthful practices is essential to enable a student to avoid illness and premature death.

Students at the university level placed themselves at tremendous risk for increased mortality and morbidity, with some demographic subgroups at particularly high risk for certain categories and specific behaviors (Rumbough L., 1996).

Barnes & Lottes studies revealed that there was a significant increase in the wellness knowledge and behavior changes during and after the semester the class was taken (Barnes J.,1996 and Lottes C.R., 1996).

However, Jacobi found that large number of students agreed that peer educators, in a group setting, were more effective in changing their health knowledge and behaviors (Jacobi C.W., 1994).

Many of studies have assessed the level of health awareness of students, using instruments developed by the researchers. El-Qaderi (1998) found that the level of health awareness of students of the department of Journalism and Mass Communication at Yarmouk University/Jordan was significantly much lower than the acceptable criterion scored.

Female students' performance was significantly higher than that of males' performance (El-Qaderi S S., 1998).

Amajority of the students rated their physical and psychological

Health as very good or good, but male students' ratings were higher than those of female students, where as the males' average scores on self-percieved quality of life were lower than those of females (Vaez, et al.,2003).

#### 1.4.1 Dietary Behaviors & Physical Activity

Healthy behaviors for nutrition and physical activity need to start with children and then be maintained throughout adulthood.

Family, schools, universities, work sites, and food-related businesses such as supermarkets, fast food outlets and restaurants are all-important outlets for nutrition information.

Recent findings suggest that the quantity and quality of school physical education programs have a significant positive effect on the health-related fitness of children and youth by increasing their participation in moderate to vigorous activities.

The dietary guidelines for Americans recommend:

- Eat a variety of foods.
- Maintain or improve one's weight by balancing food with physical activity.
- Choose a diet that is plentiful in grain products, vegetables, and fruits, moderate in salts, sodium and sugars, and low in fat, saturated fat, and cholesterol. (United States Department of Health and Human Services 1998).

Both diet and exercise play an important role in decreasing the prevalence of chronic diseases. Food safety is an environmental health issue of particular concern in universities since many young adults prepare their own meals for the first time there (Morrone, Michele, 2003).

In one study among college students, researchers found that the students consumed higher than recommended quantities of total fat, saturated fat, cholesterol, and sodium; ate inadequate amounts of fruits and vegetables; and reported poor exercise habits ( Brevard P B., and Ricketts C D., 1996).

The college years present a distinct set of nutritional priorities, and poor eating habits often worsen during this time. One study reported that 69% of college students did not eat any fruit once a day and 48% ate vegetables less than once daily (Melby C L., et al., 1986).

Colleges and universities provide numerous opportunities to positively influence physical activity, nutrition and weight management behaviors of large members of older adolescents and young adults in an educational setting.

Studies have shown that there were strong associations between physical activity and dietary behaviors with weight management goals (Lowry R., et al., 2000 and Johnson M.F., et al., 1998).

Many colleges and universities require a conceptual-based healthrelated fitness course. As a result, it is important that variables be identified that contribute to the long-term exercise behavior of students.

Byars (1997) indicated that gender was the only variable that significantly predicted exercise behavior.

Several investigations have reported that a person's perceived barriers to exercise are an important determinant of how active he or she becomes. Research has shown that, objectively or subjectively, reported barriers have a strong and consistent correlation with exercise (Sallis J., and Owen N., 1999).

The Surgeon General's Report on Physical Activity and Health documents the decline of physical activity during adolescence and establishes that promoting physical activity among youth is an important national concern (US Department of Health and Human Services 1996).

The Project Active Teens has shown that high school students exposed to conceptual rather than traditional, sports-centered programs are more likely to meet adolescent guidelines for physical activity (Dale D., et al., 1998 and Dale D., and Corbin C D., 2000). Additionally, females exposed to this type of physical education are significantly less likely to report sedentary behaviors (Dale D., et al., 1998 and Dale D., and Corbin C D., 2000).

Brynteson and Adams (1993) found that conceptual physical education courses were effective in promoting positive attitudes towards physical activity and positive changes in physical activity behaviors.

There are relationships between certain demographic factors and exercise as a health behavior.

Al-Shammari (1996) indicated that there was a significant relationship between age and exercise: younger students practice regular exercises more than older ones. According to educational background: science background students' score is higher than literature background students' scores.

#### 1.4.2 Stress Management

Stress is a part of daily life, whenever our bodies respond to any external demand, we experience stress. While stress often carries a negative connotation, such responses are often positive.

Stress management is the act of coping with the stressful events and situations with which our lives present us. College students are subject to many demands in their daily lives(Center of Healthy Student Behaviors).

College-related stress might seem to be caused only by the pressure to excel in the academic arena.

In fact, college students' experience numerous distressors, including changes caused by being away from home for the first time, pressure to make friends in a new and perhaps intimidating setting, the feeling of anonymity imposed by large classes, and the pressure related to time management. Some students are stressed by athletic team requirements, dormitory food, room-mate habits, expectations of peers, questions about personal values and beliefs, relationship problems or financial worries (Rebecca J., et al., 1994).

Females and non-athletes are more likely to be "stressed", and that "stressed" students are less likely to practice healthy behaviors and are more prone to practice bad habits (Hudd, Suzanne S.,2000).

Boutet (1994) and Parsons (1994) found that female students had more stress in their lives and experienced more illness than male students. Stress was the best independent predictors of health status followed by hardiness. Significant relationship between susceptibility towards illness and health behaviors. (Boutet C A., 1994 and Parsons L A., 1994).

The transition to college creates a situation where regular contact with traditional supports, e.g., friends from high school and family, may be reduced. The ability of such social supports to mediate the effect of exposure to stress is well documented (Ensel W., and Lin N., 1991; Schutt R K., et al., 1994 and Thoits P A., 1995).

College marks a period where new systems of social support are being created. This process can, in and of itself, be stressful. Research has shown that events which might otherwise serve to reduce stress, e.g., peer events and social activities, can actually increase feelings of stress during college (Dill P L., and Henley T B., 1998).

New peer groups that form in college can influence patterns of thought and behavior. (Lau R R., et al., 1990) have shown that there is substantial change in the performance of health behaviors during the first three years of college, and that peers can have a strong impact on the types and magnitude of these changes. It seems reasonable, then, those peers may also influence the perception of and reaction to stress. College norms that define certain types of behavior as "appropriate" under certain conditions, e.g., staying up all night to study for an exam, may be stress inducing and may lead to less healthy practices(Lau R R., et al., 1990).

Stress has been associated with a variety of negative outcomes in the adolescent population including suicide ideation (Hirsch J K., and Ellis J B., 1996); smoking (Naquin M R., and Gilbert G G., 1996); and drinking (Morgan S., 1997 and McCormack A S., 1996).

## 1.4.3 Smoking & Alcohol Use

Health behaviors such as smoking, sedentary lifestyle, alcohol and drug use are associated with an increased risk for chronic and communicable diseases. Many of these behaviors have been linked to the leading causes of death and disease: heart disease, cancer, stroke, and others. In fact of all deaths can be contributed to unhealthy behaviors (Mc Ginnis J M., and Foege W H., 1993) Tobacco use, particularly cigarette

cigarette smoking is a major cause of preventable disease and premature death worldwide. Both smokers and non-smokers exposed to environmental tobacco smoke are at risk (Health and Science Policy).

Unfortunately, the prevalence of tobacco use among adolescents continues to increase. Johnston and Colleagues found that 22% of 19-to 28-year-olds smoke daily and reported that 16% of the people in that age group smoke half a pack or more a day (Johnston L., 1995).

Results from the National Health Interview Survey indicated that 76.9% of 18-21 year-olds have tried cigarettes and that 37.6% are current smokers (Centers for Disease Control and Prevention 1994).

Where as (Abolfotouh *et al.*, 1998) compared the prevalence of regular smoking between medical students of the university college of medicine and students of the college of education.

Results revealed that the prevalence of regular smoking was higher among students of the college of education than those of the college of medicine. Medical students showed either positive or strongly positive attitudes toward public action against smoking (Abolfotouh M A., et al., 1998).

The use and abuse of alcohol and other drugs can place individuals at high risk for poor health outcomes, either as a direct result of the use from related behaviors that occur more frequently because of the use.

In three national studies of college students, heavy episodic or binge drinking was reported to exceed 40%. (Presley C A., et al 1993; Johnston L D., et al., 1991 and Wechsler H., et al., 1997).

Alcohol has also been related to nearly two thirds of violent behavior, one half of physical injuries, one third of emotional difficulties, and one third of academic problems that occur on campus ( Patrik K M., et al., 1992).

Alcohol use was the number-one substance that college students reported using in Texas. Very high percent of students have drunk analcoholic beverage at least once during their lifetimes. Among students who abstained from drinking, large percentages said that they did not drink because it was bad for their health (Kerber et al., 1997).

#### 1.4.4 Medical Care

People used to believe that medical help was necessary only when they become ill. It is now widely recognized that preventive medicine has an important role to play in maintaining the health of the population at large.

Immunization can prevent a range of common infectious disease, and screening test make it possible to detect certain type of medical problem at an early stage when they can be treated more easily (A dorling Kindersley Book 1990).

Student health centers have traditionally developed screening programs focused on preventing the spread of communicable diseases on campus, and many current recommendations reflect those origins. The American College Health Association (ACHA), for example, recommends tuberculosis screening with intradermal purified derivative (PPD) or chest X-rays on all international students admitted to colleges and universities (Bowen P A., and De armond M M., 1992).

In addition, a number of college health centers are now screening for chronic diseases or risk factors that have not been associated with infectious agents. Male college students are being instructed in monthly testicular self-examination (TSE) to diminish the morbidity, mortality, and economic impact associated with testicular cancer, the most common solid tumor in men (Pinch W J., et al., 1988 and Neef N., et al., 1991). Current guidelines from the National Cholesterol Education Program (NCEP) recommend universal cholesterol screening of adults aged 20 years and above, and many college health professionals advise cholesterol screening for all students matriculating at a college or university (Hoffman C J., and Turner T., 1994; Scheer J K., et al., 1992 and Faigel H C., 1992).

Foster (1998) described the level of breast health awareness among 18-25 years old female undergraduates. Participants scored lower at baseline on knowledge and proficiency variables. Lack of skills was identified as a barrier to breast-self examination, but fear, embarrassment and forgetfulness were not (Foster w., 1998).

In early adult life, everyone should have his or her blood pressure measured and also important is regular personal measurement of weight.

Getliffe et al., 2000) revealed that Hypertension was significantly associated with age, self-reported excess weight and marginally with self-reported non-healthy eating.

Knowledge levels were significantly and positively related to experience of stroke, healthy eating, not smoking and a recent blood pressure check.

Hypertension rates among the university volunteers are higher than those recorded from a population sample (67 Getliffe *et al.*, 2000).

#### 1.4.5 Statement of the problem

There has been a greet interest during the past centuries, as a result of health dangers that threatened the lives of both individuals and societies in the side of treatment and individuals behavior. This basic step toward prevention should be greatly emphasized upon.

The researcher has chosen the university students to be his study population because the nation's development and promotion depends greatly on their education and high way of thinking and awareness especially the youth who are the basis of the society and builders of the future.

#### 1.4.6 Purpose of the study

The study aims at achieving the following purposes: -

- 1- Realizing the level of health behaviors of the students of Palestinian non-governmental universities in the West Bank- Palestine.
- 2- Defining the influence of the following variables (University, Gender, residence place, College, Educational level, cumulative average, Father's educational level, Mother's educational level) on the health behaviors level of the students.

#### 1.5 Hypotheses of the study

The study aims at testing the following null hypotheses: -

- \* There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of students of Palestinian universities in the West Bank due to *University* variable.
- \* There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of students of Palestinian universities in the West Bank due to **Gender** variable.
- \* There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of students of Palestinian universities in the West Bank due to **Residence place** variable.

- \* There are no significant differences at (α=0.05) in the level of health behaviors of students of Palestinian universities in the West Bank due to <u>College</u> variable.
  - \* There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of students of Palestinian universities in the West Bank due to *Educational level* variable.
  - \* There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of students of Palestinian universities in the West Bank due to <u>Accumulative average</u> variable.
  - \* There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of students of Palestinian universities in the West Bank due to *Father's educational level* variable.
  - \* There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of students of Palestinian universities in the West Bank due to <u>Mother's educational level</u> variable.

#### 1.6 Significance of the study

The importance of the study is exemplifying in the following: -

- 1. This study is considered a modern topic in universities in Palestine.
- 2. It's expected through the results of this study to realize the level of the healthy behaviors of the students in the Palestinian Non-government universities in the West Bank then to benefit all who are working in the following sectors:
  - \* Planning to the Study Topics in the range of (promoting & educational Health) in Palestinian universities in order to plan based on scientific ideologies.
  - \* Healthy Sector especially who are working in Healthy sections in the universities.
  - 3. It's expected also through the results of this study to recognize to the role of the independent variables such as (University, Gender, ....... Mother's educational level ) and how its effects on the level of the healthy behaviors of the students are.
  - 4. To encourage the researches to carry out new researches in promoting and educational health aspects through having new horizons to the scientific studies.

### 1.7 Limitation of the study

The study has already covered the following limits: -

- 1. The Place: Non-government Universities in the West Bank (An-Najah, Ber-Zeit, AlQuds, Bethlehem, and Arab-American).
- 2. Human Being: a 5% of the Students in the Palestinian Universities that assess of (1057).
  - 3. The Time: the First Semester at the university year 2001/2002.

In this chapter the researcher presents the methodologies involved in this Study. The researcher classified them into the following sections: -

1. Study population

2. Sample of the study

3. Instrument

4. Procedure

5. Statistical Analysis

#### 2.1 Study population

The study population consisted of the Palestinian non-governmental university students in the West Bank-Palestine (An-Najah University, Bir-Zeit University, Arab-American University, Bethlehem University& Al-Quds University) in the first academic semester of the university year 2001/2002.

Table (2.1)
Population distribution according to University.

No.	University	N
1.	An-Najah	8500
2.	Bir-Zeit	5000
3.	Al-Quds	4940
4.	Beathlehem	1740
5.	Arab-American	960
	Total	21,140

#### 2.2 Sample of the study

The study sample, which was randomly chosen and self administered, consists of 5% of the Palestinian non-governmental universities studies in the West Bank. The total number of the sample's students was (1057).

The following tables show the distribution of the sample's individuals according to the variables of the study.

Table (2.2)

Sample distribution according to University.

University	Frequency (N)	Percentage(%)
An-Najah	425	40.2
Bir-Zeit	250	23.7
Al-Quds	247	23.4
Bethlehem	87	8.2
Arab-American	48	4.5
Total	1057	100
	1	

Table (2.3)
Sample distribution according to Gender.

Gender	Frequency (N)	Percentage (%)
Male	529	50.05
Female	528	49.95
Total	1057	100

Table (2.4)
Sample distribution according to Residence Place.

Residence Place	Frequency (N)	Percentage (%)
Village	548	51.8
City	471	44.6
Camp	38	3.6
Total	1057	100

Table (2.5)

## Sample distribution according to College.

College	Frequency (N)	Percentage (%)
Scientific Colleges	535	50.6
Humanity Colleges	522	49.4
Total	1057	100

Table (2.6)
Sample distribution according to Educational Level.

Educational Level	Frequency (N)	Percentage (%)
First year	252	23.8
Second year	261	24.7
Third year	239	22.5
Fourth year	219	20.7
Fifth year	87	8.2
Total	1057	100

Table (2.7)
Sample distribution according to Cumulative Average.

Accumulative Average	Frequency (N)	Percentage (%)
90% and more	61	5.8
80-89%	252	23.8
70-79%	681	64.4
69% and less	63	6
Total	1057	100

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Table (2.8)
Sample distribution according to Father's educational level.

Frequency	Percentage
(NI)	(0/)
361	34.2
243	23
139	13.2
314	29.7
1057	100
	361 243 139 314

Table (2.9)
Sample distribution according to Mother's educational level

Mother's educational level	Frequency	Percentage
	(NI)	(0/)
Preparatory and less	500	47.3
Secondary	326	30.8
Diploma	116	11
BA and more	115	10.9
Total	1057	100

#### 2.3. Instrument:

Based on the survey of instruments in the field of health awareness such as (1999), the researcher has prepared a questionnaire, which was divided into two parts:

- The first part included the following:

Informing the study sample individuals with the study goals and instructions about answering.

Then general information that included the student's university, gender, residence of place, college, cumulative average, educational level, father's educational level and mother's educational level.

- The second part included the domains of the questionnaire for measuring the student's level of health behaviors:
  - \* First domain: Nutrition, items 1-9
  - \* Second domain: Physical fitness, items 10-16
  - \* Third domain: Managing stress, items 17-27
  - \* Fourth domain: Smoking & alcohol, items 28-33
  - \* Fifth domain: Medical care, items 34-53

As illustrated in appendix (1).

## 2.3.1 Validity of the instrument:

To measure what is the questionnaire aimed to measure, the researcher distributed the questionnaire to a group of (8) specialized experts.

Reformations were done to questionnaire after they agree that it is suitable for the study purpose, and then it was brought out in its final form.

## 2.3.2 Reliability of the instrument:

Alpha formula was used to determine the reliability of the instrument as in Table (2.10).

Table (2.10)
Alpha formula for reliability of questionnaire.

Reliability
0.83
0.86
0.77
0.69
0.86
0.87

The reliability of the questionnaire was (0.87), such value is suitable for conducting our research.

#### 2.4. Procedure:

The researcher conducted the following steps to perform the study's procedures:

- \* Defining the study sample: 5% of the Palestinian non-governmental university students in the West Bank in the first semester of the university year 2001/2002. Their number was (1057) students when the questionnaire was conducted.
- \* Based on the survey of instruments in the field of health awareness such as (1999), the researcher has prepared a questionnaire.

The questionnaire that the study conducted during the first semester of the Universities year 2001/2002 was randomly distributed depending on self-administrated personal interviews.

### 2.5 Statistical analysis:

In order to analysis the data, the researcher used statistical techniques using the (SPSS) statistical packages.

The following statistics were used:

- (1) Means and percentages.
- (2) Independent (t-test).
- (3) One-Way-Analysis of variance (ANOVA), and Scheffes' post-hoc test.
- (4) MANOVA using wilk's lambda test.
- (5) Sidak Pairwise Comparisons test.

The results are displayed in this chapter a researcher categorized results

- \*\* Part (1) deals with the level of of Palestinian non-governmental ur Palestine. In addition, ranks of ' calculated.
- \*\* Part (2) deals with the results row (health behaviors and university variable).
- \*\* Part (3) deals with the results related to the second hypothesis (health behaviors and gender variable).
- \*\* Part (4) deals with the results related to the third hypothesis (health behaviors and residence place variable).
- \*\* Part (5) deals with the results related to the fourth hypothesis (health behaviors and college variable).
- \*\* Part (6) deals with the results related to the fifth hypothesis (health behaviors and educational level variable).
- \*\* Part (7) deals with the results related to the sixth hypothesis (health behaviors and ccumulative average variable).
- \*\* Part (8) deals with the results related to the seventh hypothesis (health behaviors and father's educational level variable).
- \*\* part (9) deals with the results related to the eighth hypothesis (health behaviors and mother's educational level variable).

# 3.1 Results related to the first question:

What is the level of health behaviors among Palestinian non-governmental university students in West Bank-Palestine? To answer the question, means and percentages of each item, domains and total score of health behaviors were used as in tables 3.1,3.2,3.3,3.4,3.5 and 3.6 shows ranks of domains and total score of health behaviors.

For data analysis, the researcher used the following percentages:

80% and more is very high degree of health behaviors.

70-79% is high degree of health behaviors.

60-69% is moderate degree of health behaviors.

50-59% is low degree of health behaviors.

Less than 50% is very low degree of health behaviors.

In the following part the researcher presents each domain of health behaviors and its means and percentages:

# 1- Nutrition domain:

Table (3.1)
Means and percentages of nutrition domain

No	Item	Means*	Percent (%)	Level
1-	I have balanced meals that contain	3.40	68	Moderate
	carbohydrates, proteins, vitamins, and fat.			J
2-	I eat limited quantities of fats.	3.10	62	Moderate
3-	I prefer grilled food to fried food.	3.76	75.2	High
4-	I eat salads with the main meals.	3.72	74.4	High
5-	I eat more fresh fruit and vegetables than canned ones.	4.05	81	V.high
6-	I read labels for information about the nutritional quantity of food.	3.28	65.6	Moderate
7-	I maintain an appropriate weight.	3.51	70.2	High
8-	If I need to decrease my weight, I avoid eating the food that increases fatness.	3.37	67.4	Moderate
9-	I prefer quick meals to home meals.	2.64	52.8	Low
	Total score of nutrition	3.42	68.4	Moderate

Table (3.1) shows that the level of health behaviors among students on items of nutrition domain is very high on item 5, the percentage of response on this item is greater than 80%.

The level is high on items 3,4 and 7 where the range of percentages of responses on these items are between 70.2-75.2% and the level is moderate on items 1,2,6 and 8 where the range of percentages of responses on these items are between 62-68%. The level is low on item 9 where the percentage of response is 52.8%.

For the total score of health behaviors of nutrition domain the level was moderate where the percentage of response was 68.4%.

# 2- Physical fitness domain:

Table (3.2)
Means and percentages of physical fitness domain

No.	ltem	Means*	Percent (%)	Level
10-	I participate in continuous, physical activity for (20-30) minutes or more at least three times per week.	2.54	50.8	Low
11-	I follow an exercise program appropriate for my level of fitness.	2.35	47	V.low
12-	I warm up properly before vigorous activity and cool down afterwards.	2.55	51	Low
13-	I use exercise equipment properly and safely.	2.66	53.2	Low
14-	I swim only when others are present.	1.99	39.8	V.low
15-	I wear highly visible clothing when exercising out doors such as walking, running, or biking.	2.56	51.2	Low
16-	I put sports clothes that are suitable for the weather state during exercises.	2.82	56.4	Low
	Total score of physical fitness	2.49	49.8	V.low

According to Table (3.2) it is clear that it shows the level of health behaviors among students for items of physical fitness domain are low on items 10,12,13,15 and 16 where the range of percentages of

responses are between 50.8-56.4% and the level is very low on items 11 and 14 where the percentages of responses are respectively 47 and 39.8%. For total score of health behaviors for physical fitness domain the level was very low where the percentage of response was 49.8%.

### 3- Managing stress domain:

Table (3.3)
Means and percentages of managing stress domain

No.	Item	Means*	Percent (%)	Level
17-	I schedule my day to allow time for leisure activity.	3,38	67.6	Moderate
18-	I get an adequate amount of sleep.	3.53	70.6	High
19-	I express my feelings of anger or anxiety frankly and clearly.	3.69	73.8	High
20-	I say "no" without feeling guilty.	3.53	70.6	High
21-	I make decisions with a minimum of stress and worry.	3.44	68.8	Moderate
22-	I set realistic goals for myself.	3.70	74	High
23-	I accept responsibility for my actions.	4.20	84	V.high
24-	I allow myself to cry.	3.18	63.6	Moderate
25-	I seek professional help when stress becomes too difficult to manage.	2.25	45	V.low
26-	I manage stress so that it does not affect my physical well being.	3.03	60.6	Moderate
27-	I discuss problems with friends or relatives.	3.46	69.2	Moderate
	Total score of managing stress	3.39	67.8	Moderate

Table (3.3) shows that the level of health behaviors among students for items of managing stress domain are very high on item 23 where the percentage of response is greater than 80%. As one may notice that the level is high on items 18,19, 20 and 22 where the range of percentages of responses on these items are between 70.6-74%. The level is moderate on items 17, 21, 24, 26 and 27 where the range of

percentages of responses on these items are between 60.6-69.2% and the level is very low only on item 25 where the percentage of response is 45%.

For total score of health behaviors for managing stress domain the level was moderate where the percentage of response was 67.8%.

## 4- Smoking and Alcohol domain:

Table (3.4)
Means and percentages of smoking and alcohol domain

No.	Item	Means*	Percent (%)	Level
28-	I avoid smoking cigarettes or other kind.	3.95	79	High
29-	I try to avoid inhaling the smoke of others.	3.84	76.8	High
30-	I avoid using illegal substances such as uppers and crack.	4.58	91.6	V.high
31-	I drink fewer than five alcoholic beverages per week.	3.48	69.6	Moderate
32-	I avoid driving the car or taking it under the influence of alcohol or drugs.	4.30	86	V.high
33-	I avoid taking any kind of activators.	4.47	89.4	V.high
	Total score of smoking and alcohol	4.10	82	V.high

Table (3.4) shows that the level of health behaviors among students for items of smoking and alcohol domain are very high on items 30,32 and 33 where the percentages of responses of these items are greater than 80% and the level is high on items 28 and 29 where the percentages of responses are respectively 79 and 76.8%. And the level is moderate only on item 31 where the percentage of response is 69.6%. For total score of health behaviors for smoking and alcohol

domain, the level was very high where the percentage of response was 82%.

# 5- Medical care domain:

Table (3.5)
Means and percentages of medical care domain

	Item	Means*	Percent(%)	Level
		:		L
34-	I inform doctors with medicines that I	3.83	76.6	High
	take in order to avoid the side effects.			
35-	I follow the doctor's instructions when I	4.21	84.2	V.high
	take a medical prescription.			
36-	I read the inside leaflet of instructions of	4.16	83.2	V.high
	the medicine before using it.			
37-	I examine the expiry date of the medicine	4.24	84.8	V.high
	before using it.			
38-	I keep the medicine in the place described		83.6	V.high
	I keep the medicine in the place described 4.18 83 in the leaflet.			
39-	I seek appropriate care as necessary, when	3.92	78.4	High
	I feel un-well or tired.			
40-	I maintain an accurate, written current	3.26	65.2	Moderate
	personal health history.			
41-	I brush my teeth at least once a day.	4.15	83	V.high
42-	I ask questions of health care providers.	3.46	69.2	Moderate
43-	I use a sun-glass when I spend long time	2.70	54	Low
	under the sun.			
44-	I avoid incorrect styles of sexual behavior.	4.16	83.2	V.high
45-	I practice good personal hygiene by	4.30	86	V.high
	bathing daily and washing my hands			
ļ	frequently.			
46-	I have regular medical checkups.	3.08	61.6	Moderate
47-	I have regular dental checkups.	2.84	56.8	Low
48-	I have regular eye examinations.	2.82	56.4	Low
49-	I am committed with a physiotherapy test	2.64	52.8	Low
	for my chest to avoid the appearance of			
	any abnormal mark.			
50-	I maintain adequate health insurance	3.10	62	Moderate
	coverage.			ļ
51-	I am committed with conducting	2.62	52.4	Low
	periodical laboratory investigation			
	especially infectious and hereditary			
<del></del>	diseases.	2.05	<del></del>	<u>-</u>
52-	I watch regularly T.V.seminars that are	2.87	57.4	Low
<u></u>	related with public health.			1
53-	I read regularly essays that are concerned	2.93	58.6	Low
	with environment and public health.			
	Total score of medical care	3.47	69.4	Moderate
		·		<del> </del>

Table (3.5) shows the level of health behaviors among students for items of medical care domain are very high on items 35,36,37,38,41,44 and 45 where the percentages of responses are greater than 80%. As one may notice that the level is high on items 34 and 39 where the percentages of responses are respectively 76.6 and 78.2%. The level is moderate on items 40,42,46 and 50 where the range of percentages of responses are between 61.6-69.2%, and the level is low on items 43,47,48,49,51,52 and 53 where the range of percentages of responses are between 52.4-58.6%.

For total score of health behaviors for medical care domain, the level was moderate where the percentage of response was 69.4%.

Table (3.6)
Ranks of domains and total score of health behaviors

Domain	Means*	Percent (%)	Level	Rank
Nutrition	3.42	68.4	Moderate	3
Physical fitness	2.49	49.8	V.low	5
Managing stress	3.39	67.8	Moderate	4
Smoking and Alcohol	4.10	82	V.high	~1
Medical care	3.47	69.4	Moderate	2
Total score	3.37	67.4	Moderate	
				1

The results of Table (3.6) shows:

- 1- Very high level of health behaviors among Palestinian university Students in West Bank-Palestine only on smoking and alcohol domain.
- 2- The level of of health behaviors was moderate on the following domains (nutrition, managing stress, medical care and total score).
- 3- The level of health behaviors was very low only on physical fitness domain. The range of percentages of responses on the domains is between 49.8-82% and 67.4% for the total score of health behaviors. Furthermore, the results indicated that the ranks of domains are as follow:

First rank: Smoking and alcohol domain 82%

Second rank: Medical care domain 69.4%

Third rank: Nutrition domain 68.4%

Fourth rank: Managing stress domain 67.8%

Fifth rank: Physical fitness domain 49.8%

To determine if there is a significant difference among health behavior domains Repeated (MANOVA) Wilk's Lambda Test was used as in Table (3.7).

Table (3.7)
Results of Wilk's Lambda test for the difference of health behavior domains

	Wilk's Lambda Value	(F) Value	Hypothesis (Df)	Error (Df)	Sig. *
T	0.40	389.8	4	1053	0.000*

<sup>\*</sup> Significant at  $(\alpha=0.05)$ .

The results of Table (3.7) shows that there is a significant difference at  $(\alpha=0.05)$  among health behaviors domains.

To determine between which domains the difference found Sidak Pairwise Comparisons Test was conducted as in Table (3.8).

Table (3.8)
Sidak Pairwise Comparisons test among health behavior domains

Domain	Nutrition	Physical fitness	Managing stress	Smoking and alcohol	Medical care
Nutrition		0.92*	0.02	- 0.67*	- 0.04*
Physical fitness			- 0.90*	- 1.60*	- 0.97*
Managing stress				- 0.70*	- 0.07*
Smoking and alcohol					0.63*
Medical care					

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

The results of Table (3.8) shows that there are significant differences among health behavior domains as follows:

- \* (Nutrition) and (Physical fitness) domains in favor of nutrition.
- \* (Nutrition) and (Smoking & alcohol) domains in favor of smoking & alcohol.
- \* (Nutrition) and (Medical care) domains in favor of medical care.
- \* (Physical fitness) and (Managing stress) domains in favor of managing stress.
- \* (Physical fitness) and (Smoking & alcohol) domains in favor of smoking & alcohol.
- \* (Physical fitness) and (Medical care) domains in favor of medical care.
- \* (Managing stress) and (Smoking & alcohol) domains in favor of smoking & alcohol.
- \* (Managing stress) and (Medical care) domains in favor of medical care.
- \* (Smoking & alcohol) and (Medical care) domains in favor of smoking & alcohol.

### 3.2 Results related to the first hypothesis

There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of the students of Palestinian universities in West Bank due to University variable. For testing this hypothesis, One-Way-Analysis of variance (ANOVA) was used, where Table (3.9) shows means of health behavior domains according to university variable and Table (3.10) shows the results of (ANOVA) test.

Table (3.9)
Means of health behavior domains according to university variable

Domain	Arab- American	An-Najah	Al-Quds	Beathlehe m	Bir-Zeit
Nutrition	3.78	3.39	3.40	3.45	3.41

Physical fitness	2.20	2.38	2.61	2.56	2.60
Smoking and alcohol	3.91	4.19	4.07	4.00	4.04
Medical care	3.83	3.40	3.53	3.45	3,45
Total	3.56	3.35	3.39	3.37	3,37

Table (3.10)
Results of One-Way-ANOVA test for health behaviors according to university variable

	***	11 101010	114010			
Domain	Source of	Sum of	DF	Mean	F	Sig.*
	variance	squares		square		
Nutrition	Between groups	6.809	4	1.702	5.548	0.000*
	Within groups	322.77	1052	0.307		
	Total	329.589	1056			
Physical fitness	Between groups	15.976	4	3.994	4.075	0.003*
. •	Within groups	1030.952	1052	0.980		
	Total	1046.928	1056			
Managing	Between groups	22.923	4	5.731	18.433	0.000*
stress	Within groups	327.067	1052	0.311	<b>,</b>	
	Total	349.990	1056			
Smoking and	Between groups	7.311	4	1.828	2.272	0.060
alcohol	Within groups	846.443	1052	0.805		
	Total	853.754	1056			
Medical care	Between groups	9.131	4	2.283	5.524	0.000*
	Within groups	434.707	1052	0.413		
	Total	443.838	1056			•
Total score	Between groups	2.004	4	0.501	2.448	0.045*
	Within groups	215.358	1052	0.205		
	Total	217.362	1056			

<sup>\*</sup> Significant at ( $\alpha$ =0.05), critical (F) value (2.40).

The results of Table (3.10) shows that computed (F) values on all domains and total score of health behaviors are respectively 5.54,4.07,18.43,2.27, 5.52 and 2.44 while the critical (F) value (2.40).

This means that the results are significant differences at  $(\alpha=0.05)$  on the following domains (nutrition, physical fitness, managing stress, medical care and total score according to university variable because of computed (F) values at these domains are greater than critical (F) value. To determine between whom the differences were found **Scheffes' post-hoc test** was conducted as in tables (3.11), (3.12), (3.13), (3.14) and (3.15).

Table (3.11)
Scheffes' post-hoc test for the differences of nutrition domain according to university variable

University	Arab- American	An-Najah	Al-Quds	Beathlehe m	Bir-Zeit
Arab- American		0.38*	0.38*	0.32*	0.36*
An-Najah			- 0.004	- 0.06	- 0.02
Al-Quds				- 0.05	- 0.01
Beathlehe m					0.04
Bir-Zeit					

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

The results of Table (3.11) shows that there are significant differences at  $(\alpha=0.05)$  for nutrition domain between:

- \* (Arab-American) and (An-Najah) universities in favor of Arab-American.
- \* (Arab-American) and (Al-Quds) universities in favor of Arab-American.
- \* (Arab-American) and (Beathlehem) universities in favor of Arab-American.

Table (3.12)
Scheffes' post-hoc test for the differences of physical fitness according to university variable

University	Arab- American	An-Najah	Al-Quds	Beathlehem	Bir- Zeit
Arab- American		- 0.18	- 0.41*	- 0.36	- 0.39*
An-Najah			- 0.22	- 0.18	- 0.21
Al-Quds				0.04	0.01
Beathlehem					- 0.03
Bir-Zeit					

Significant at  $(\alpha=0.05)$ .

Table (3.12) shows that there are significant differences at  $(\alpha=0.05)$  for physical fitness domain between:

- \* Arab-American and Al-Quds in favor of Al-Quds.
- \* Arab-American and Bir-Zeit in favor of Bir-Zeit.

Table (3.13)

Scheffes' post-hoc test for the differences of managing stress according to university variable

University	Arab- American	An-Najah	Al-Quds	Beathlehem	Bir-Zeit
Arab- American		0.69*	0.70*	0.69*	0.72*
An-Najah			0.002	- 0.006	0.02
Al-Quds				- 0.009	0.02
Beathlehem					0.03
Bir-Zeit					

<sup>\*</sup> Significant at (α=0.05).

Table (3.13) shows that there are significant differences at  $(\alpha=0.05)$  for managing stress domain between:

- \* Arab-American and An-Najah in favor of Arab-American.
- \* Arab-American and Al-Quds in favor of Arab-American.
- \* Arab-American and Beathlehem in favor of Arab-American.
- \* Arab-American and Bir-Zeit in favor of Arab-American.

Table (3.14)
Scheffes' post-hoc test for the differences of medical care according to university variable

University	Arab- American	An-Najah	Al-Quds	Beathlehem	Bir-Zeit
Arab- American		0.42*	0.29	0.37*	0.37*
An-Najah			- 0.12	- 0.04	- 0.05
Al-Quds				0.08	0.07
Beathlehem					- 0.003
Bir-Zeit					

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.14) shows that there are significant differences at  $(\alpha=0.05)$  for medical care domain between:

- \* Arab-American and An-Najah in favor of Arab-American.
- \* Arab-American and Beathlehem in favor of Arab-American.
- \* Arab-American and Bir-Zeit in favor of Arab-American.

Table (3.15)

Scheffes' post-hoc test for the differences of total score according to university variable

University	Arab- American	An-Najah	Al-Quds	Beathlehem	Bir-Zeit
Arab- American		0.20*	0.16	0.18	0.18
An-Najah			- 0.04	- 0.02	- 0.02
Al-Quds				0.02	0.02
Beathlehem					- 0.00
Bir-Zeit				7	

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.15) shows that there is a significant difference at  $(\alpha=0.05)$  for total score between: Arab-American and An-Najah in favor of Arab-American.

### 3.3 Results related to the second hypothesis

There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of the students of Palestinian universities in West Bank due to **Gender** variable.

For testing this hypothesis Independent t-test was used in table (3.16).

Table (3.16)
Results of independent t-test according to gender variable

Domain	Male	=529	Female	=528	(T)	Sig.*
<u> </u>	M	SD	M	SD	Value	
Nutrition	3.31	0.507	3.53	0.585	6.49	0.000*
Physical fitness	2.72	1.018	2.26	0.917	7.66	0.000*
Managing stress	3.33	0.523	3.45	0.618	3.37	0.001*
Smoking and alcohol	3.86	0.945	4.34	0.780	8.97	0.000*
Medical care	3.34	0.664	3.59	0.607	6.37	0.000*
Total score	3.31	0.478	3.44	0.419	4.40	0.000*

<sup>\*</sup> Critical t-test value at ( $\alpha$ =0.05) equal (1.96).

The results of Table (3.16) shows that computed (T) value for all domains and total score of health behaviors are respectively 6.49, 7.66, 3.37, 8.97, 6.37 and 4.40. All of these values are greater than the critical value of t-test, this means that there are significant differences at ( $\alpha$ =0.05) for all domains and total score of health behaviors between male and female students in favor of female students, except for physical fitness domain in favor of male students.

# 3.4 Results related to the third hypothesis

There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of the students of Palestinian universities in West Bank due to **Residence of place** variable.

For testing this hypothesis, One-Way-Analysis of variance (ANOVA) was used, where Table (3.17) shows means of health

behavior domains according to residence of place variable and Table (3.18) shows the results of (ANOVA) test.

Table (3.17)
Means of health behavior domains according to residence of place variable

Domain	Village	City	Camp
Nutrition	3.39	3,46	3.35
Physical fitness	2.53	2.45	2.45
Managing stress	3.38	3.41	3.42
Smoking and alcohol	4.05	4.16	3.99
Medical care	3.44	3.50	3.43
Total score	3.36	3.40	3.33

Table (3.18)
Results of One-Way-ANOVA test according to residence place variable

Domain	Source of variance	Sum of squares	DF	Mean square	F	Sig.*
Nutrition	Between groups	1.602	2	0.801	2,57	0.07
	Within groups	327.986	1054	0.311		
	Total	329.589	1056			
Physical	Between groups	1.428	2	0.714	0.72	0.48
fitness	Within groups	1045.501	1054	0.992		
	Total	1046.928	1056			
Managing	Between groups	0.222	2	0.111	0.33	0.71
stress	Within groups	349.767	1054	0.332	i	}
	Total	349.990	1056		<u> </u>	
Smoking	Between groups	3,385	2	1.692	2.09	0.12
and alcohol	Within groups	850.369	1054	0.807		
	Total	853.754	1056			
Medical	Between groups	0.989	2	0,495	1.17	0.30
care	Within groups	442.849	1054	0.420		
	Total	443.838	1056		1	
Total score	Between groups	0.481	2	0,240	1.16	0.31
	Within groups	216,882	1054	0.206		
	Total	217.362	1056	ì		

<sup>\*</sup> Significant at ( $\alpha$ =0.05), critical (F) value (2.40).

The results of Table (3.18) shows that there is no significant difference in the level of health behaviors of students according to residence place.

### 3.5 Results related to the fourth hypothesis

There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of the students of Palestinian universities in West

Bank due to **College** variable. For testing this hypothesis **Independent t-test** was used in Table (3.19).

Table (3.19)
Results of Independent t-test according to college variable

Domain	Humanity	Colleges	Scientific	Colleges	(T)	Sig.
	M	SD	M	SD	Value	*
Nutrition	3.39	0.564	3.45	0.551	1.54	0.12
Physical fitness	2.38	0.965	2.61	1.013	3.79	0.00
Managing stress	3.36	0.544	3,43	0.604	1.95	0.05
Smoking and alcohol	4.15	0.879	4.05	0.916	1.85	0.64
Medical care	3.45	0.612	3,49	0.683	1.08	0.28
Total score	3.35	0.428	3.40	0.477	2.10	0.03

<sup>\*</sup> Critical t-test value at ( $\alpha$ =0.05) equal (1.96).

The results of Table (3.19) shows that computed (T) value for nutrition, smoking and medical care domains are lower than critical t-test value, this means that there are no significant differences at ( $\alpha$ =0.05) between scientific and humanity colleges. While there are significant differences at ( $\alpha$ =0.05) on physical fitness, managing stress domains and total score of health behaviors between scientific and humanity colleges in favor of scientific colleges.

### 3.6 Results related to the fifth hypothesis

There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of the students of Palestinian universities in West Bank due to **Educational level** variable.

For testing this hypothesis, One-Way-Analysis of variance (ANOVA) was used, where Table (3.20) shows means of health

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Table (3.20)

Means of health behavior domains according to educational level variable

Domain	First year N=252	Second year N=261	Third year N=238	Fourth year N=219	Fifth year N=87
Nutrition	3.46	3.37	3.39	3.40	3.57
Physical fitness	2.73	2.48	2.44	2.38	2.22
Managing stress	3.51	3.36	3.35	3.32	3.45
Smoking and alcohol	4.20	4.10	4.03	4.03	4.15
Medical care	3.57	3.44	3.40	3.42	3.56
Total score	3.50	3.35	3.32	3.31	3,39

Table (3.21)
Results of One-Way-ANOVA test according to educational level variable

Domain	Source of	Sum of	DF	Mean	F	Sig.*
	variance	squares		square	<u> </u>	
Nutrition	Between groups	3.389	4	0.847	2.73	0.028*
	Within groups	326,200	1052	0.340		
	Total	329.589	1056			
Physical	Between groups	24.257	4	6.064	6.23	0.000*
fitness	Within groups	1022.671	1052	0.972		
	Total	1046,928	1056			
Managing	Between groups	5.513	4	1.378	4.20	0.002*
stress	Within groups	344,477	1052	0.327		]
201 000	Total	349.990	1056			İ
Smoking	Between groups	4.799	4	1.200	1.48	0.204
and	Within groups	848.955	1052	0.807		
alcohol	Total	853,754	1056			
Medical	Between groups	5.443	4	1.361	3.26	0.011*
care	Within groups	438.395	1052	0.417		
	Total	443,838	1056			
Total	Between groups	5,375	4	1.344	6.66	0.000*
score	Within groups	211.987	1052	0.202		
	Total	217.362	1056			

<sup>\*</sup> Significant at ( $\alpha$ =0.05), critical (F) value (2.40).

The results of Table (3.21) shows that there is no significant difference at  $(\alpha=0.05)$  on (smoking & alcohol) domain of health behaviors of the students according to educational level.

However, the results are significant at  $(\alpha=0.05)$  on the following domains (nutrition, physical fitness, managing stress, medical care and total score) according to the educational level where computed (F) values of these domains are greater than critical (F) value.

To determine between whom the differences were found Scheffes' post- hoc test was conducted as in tables (3.22), (3.23), (3.24), (3.25) and (3.26).

Table (3.22)
Scheffes' post-hoc test for the differences of nutrition domain according to educational level variable

Education al level	First year	Second year	Third year	Fourth year	Fifth year
First year		0.09	0.07	0.05	- 0.10
Second year			- 0.01	- 0.03	- 0.20*
Third year				- 0.01	- 0.18
Fourth year					- 0.16
Fifth year					

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.22) shows that there is a significant difference at  $(\alpha=0.05)$  on nutrition domain between second level and fifth level in favor of fifth level.

Table (3.23)
Scheffes' post-hoc test for the differences of physical fitness domain according to educational level variable

Education al level	First year	Second year	Third year	Fourth year	Fifth year
First year		0.25	0.29*	0.35*	0.50*
Second year			0.04	0.09	0.25
Third year				0.05	0.21
Fourth year					0.15
Fifth year					

<sup>\*</sup> Significant at (α=0.05).

The results of Table (3.23) shows that there are significant differences at  $(\alpha=0.05)$  on physical fitness domain between:

- \* First level and third level in favor of first level.
- \* First level and fourth level in favor of first level.
- \* First level and fifth level in favor of first level.

Table (3.24)
Scheffes' post-hoc test for the differences of managing stress domain according to educational level variable

Education al level	First year	Second year	Third year	Fourth year	Fifth year_
First year		0.14	0.15	0.18*	0.06
Second year			0.01	0.04	- 0.08
Third year				0.02	- 0.09
Fourth year					- 0.12
Fifth year					

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.24) shows that there is a significant difference at  $(\alpha=0.05)$  on managing stress domain between first level and fourth level in favor of first level.

Table (3.25)
Scheffes' post-hoc test for the differences of medical care domain according to educational level variable

Educational level	First year	Second year	Third year	Fourth year	Fifth year_
First year		0.13	0.17*	0.14	0.01
Second year			0.04	0.01	- 0.12
Third year				- 0.02	- 0.16
Fourth year					- 0.13
Fifth year					

<sup>\*</sup> Significant at  $(\alpha=0.05)$ .

Table (3.25) shows that there is a significant difference at  $(\alpha=0.05)$  on medical care domain between first level and third level in favor of first level.

Table (3.26)
Scheffes' post-hoc test for the differences of total score according to educational level variable

Educational level	First year	Second year	Third year	Fourth year	Fifth year
First year		0.14*	0.17*	0.18*	0.10
Second year			0.03	0.03	- 0.04
Third year				0.00	- 0.07
Fourth year					- 0.07
Fifth year	,				

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.26) shows that there are significant differences at  $(\alpha=0.05)$  on total score of health behaviors according to educational level variable between:

- \* First level and second level in favor of first level.
- \* First level and third level in favor of first level.
- \* First level and fourth level in favor of first level.

### 3.7 Results related to the sixth hypothesis

There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of the students of Palestinian universities in West Bank due to **Accumulative average** variable.

For testing this hypothesis, **One-Way-ANOVA** was used, where Table (3.27) shows means of health behavior domains according to accumulative

average variable and Table (3.28) shows the results of (ANOVA) test.

Table (3.27)
Means of health behavior domains according to accumulative average variable

V 655, 265 C 7 C							
Domain	90% and more	80-89%	70-79%	69% and less			
Nutrition	3.62	3.42	3.42	3.23			
Physical fitness	2.51	2.42	2.51	2.57			
Managing stress	3.53	3.38	3.40	3.21			
Smoking and alcohol	4.25	4.18	4.08	3.89			
Medical care	3.61	3.49	3.47	3.22			
Total score	3.50	3.38	3.38	3.22			

Table (3.28)

Results of One-Way-ANOVA test according to accumulative average variable

		variati				
Domain	Source of variance	Sum of	DF	Mean	F	Sig.*
		squares		square	]	
Nutrition	Between groups	4.761	3	1.587	5.14	0.002*
	Within groups	324.828	1053	0.308		
	Total	329.589	1056			
Physical	Between groups	1.869	3	0.623	0.62	0.59
fitness	Within groups	1045.059	1053	0.992		1
	Total	1046.928	1056			
Managing	Between groups	3.372	3	1.124	3.41	0.017*
stress	Within groups	346,618	1053	0.329		
011 000	Total	349.990	1056_			
Smoking	Between groups	6.119	3	2.040	2.53	0.056
and alcohol	Within groups	847.635	1053	0.805		
	Total	853.754	1056		İ	
Medical	Between groups	5.214	3	1.738	4.17	0.006*
care	Within groups	438.624	1053	0.417		
-	Total	443.838	1056			
Total score	Between groups	2.456	3	0.819	4.01	0.007*
	Within groups	214.907	1053	0.204	1	
	Total	217.362	1056			

<sup>\*</sup> Significant at ( $\alpha$ =0.05), critical (F) value (2.40).

The results of Table (3.28) shows that there are significant differences at ( $\alpha$ =0.05) on the following domains (nutrition, managing stress, medical care and total score of health behaviors) according to accumulative average variable because of computed (F) values at these domains are greater than critical (F) value.

To determine between whom the differences were found **Scheffes'** post-hoc test was conducted as in tables (3.29), (3.30), (3.31) and (3.32).

Table (3.29)
Scheffes' post-hoc test for the differences of nutrition domain according to accumulative average variable

Accumulative average	90% and more	80-89%	70-79%	69% and less
90% and more		0.19	0.19	0.39*
80-89%			- 0.000	0.19
70-79%				0.19
69% and less				

<sup>\*</sup> Significant at  $(\alpha=0.05)$ .

Table (3.29) shows that there is a significant difference at ( $\alpha$ =0.05) on nutrition domain according to accumulative average variable between: - (90% and more) & (69% and less) in favor of 90% and more.

Table (3.30)
Scheffes' post-hoc test for the differences of managing stress domain according to accumulative average variable

Accumulative average	90% and more	80-89%	70-79%	69% and less
90% and more		0.14	0.12	0.32*
80-89%			- 0.02	0.17
70-79%				0.19
69% and less				

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.30) shows that there is a significant difference at ( $\alpha$ =0.05) on managing stress domain according to accumulative average variable between: (90% and more) & (69% and less) in favor of 90% and more.

Table (3.31)
Scheffes' post-hoc test for the differences of medical care according to accumulative average variable

Accumulative average	90% and more	80-89%	70-79%	69% and less
90% and more		0.12	0.14	0.39*
80-89%			0.02	0.26*
70-79%				0.24*
69% and less				

<sup>\*</sup> Significant at  $(\alpha=0.05)$ .

The results of Table (3.31) shows that there are significant differences at  $(\alpha=0.05)$  on medical care domain according to accumulative average variable between:

- \* (90% and more) & (69% and less) in favor of 90% and more.
- \* (80-89) & (69% and less) in favor of 80-89%.
- \* (70-79) & (69% and less) in favor of 70-79%.

Table (3.32)
Scheffes' post-hoc test for the differences of total score according to accumulative average variable

Accumulative average	90% and more	80-89%	70-79%	69% and less
90% and more		0.12	0.12	0.28*
80-89%			0.00	0.15
70-79%				0.15
69% and less				

Significant at ( $\alpha$ =0.05).

Table (3.32) shows that there is a significant difference at ( $\alpha$ =0.05) on total score of health behaviors according to accumulative average between: (90% and more) & (69% and less) in favor of 90% and more.

### 3.8 Results related to the seventh hypothesis

There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of the students of Palestinian universities in West Bank due to **Father's educational level** variable.

For testing this hypothesis, One-Way-ANOVA test was used, where Table (3.33) shows means of health behavior domains according to father's educational level variable and Table (3.34) shows the results of (ANOVA) test.

Table (3.33)
Means of health behavior domains according to father's educational level variable

Domain	Preparatory and less	Secondary	Deploma	BA. and more
Nutrition	3.34	3.45	3.43	3.48
Physical fitness	2.50	2.52	2.32	2.53
Managing stress	3.40	3.39	3.38	3.39
Smoking and alcohol	4.13	4.12	4.01	4.09
Medical care	3.39	3.52	3.43	3.53
Total score	3.35	3.40	3.31	3.41

Results of One-Way-ANOVA test according to father's educational level variable

Domain	Source of variance	Sum of	DF	Mean	F	Sig.
Domain	Source of variance	squares		square		*
	D-4	3,430	3	1.143	3.69	0.01
Nutrition	Between groups		i -	1	3.07	*
	Within groups	326.159	1053	0.310	1	
	Total	329.589	1056			
Physical	Between groups	5.609	3	1.690	1.70	0.16
fitness	Within groups	1041.859	1053	0.989		
	Total	1046.928	1056_			
Managin	Between groups	0.0604	3	0.020	0.06	0.98
g stress	Within groups	349.929	1053	0.332		
B 34. 600	Total	349,990	1056			
Smoking	Between groups	1.522	3	0.507	0.62	0.59
and	Within groups	852,232	1053	0.809		
alcohol	Total	853.754	1056			
Medical	Between groups	4,749	3	1.583	3.79	0.01
care	Within groups	439.089	1053	0.417		*
CHIC	Total	443.838	1056			
Total	Between groups	1.131	3	0.377	1.83	0.13
score	Within groups	216.232	1053	0.205		
	Total	217.362	1056			<u> </u>

<sup>\*</sup> Significant at (α=0.05), critical (F) value (2.40).

The results of Table (3.34) shows that there are significant differences at ( $\alpha$ =0.05) on nutrition and medical care domains of health behaviors of the students according to father's educational level where computed (F) values of these domains are greater than critical (F) value.

To determine between whom the differences were found Scheffes' post-hoc test was conducted as in tables (3.35) and (3.36).

Table (3.35)
Scheffes' post-hoc test for the differences of nutrition domain according to father's educational level variable

Father's educational level	Preparatory and less	Secondary	Deploma	BA. And more
Preparatory and less		- 0.10	- 0.08	- 0.13*
Secondary			0.02	- 0.02
Deploma				- 0.05
BA. And more				

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.35) shows that there is a significant difference at  $(\alpha=0.05)$  on nutrition domain according to father's educational level between: (Preparatory and less) & (BA and more) in favor of BA and more.

Table (3.36)
Scheffes' post-hoc test for the differences of medical care domain according to father's educational level variable

Father's educational level	Preparatory and less	Secondary	Deploma	BA. And more
Preparatory and less		- 0.13*	- 0.04	- 0.14*
Secondary			0.09	- 0.01
Deploma				- 0.10
BA. And more				

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.36) shows that there are significant differences at  $(\alpha=0.05)$  on medical care domain according to father's educational level between:

- \* (Preparatory and less) & (BA and more) in favor of BA and more.
  - \* (Preparatory and less) & (Secondary) in favor of secondary.

### 3.9 Results related to the eighth hypothesis

There are no significant differences at  $(\alpha=0.05)$  in the level of health behaviors of the students of Palestinian universities in West Bank due to Mother's educational level variable.

For testing this hypothesis, **One-Way-ANOVA** test was used, where Table (3.37) shows means of health behavior domains according to mother's educational level variable and Table (3.38) shows the results of (ANOVA) test.

Table (3.37)

Means of health behavior domains according to mother's educational level variable

Domain	Preparatory and less	Secondary	Deploma	BA and more
Nutrition	3.34	3.46	3.53	- 3.54
Physical fitness	2.44	2.54	2.35	2.72
Managing stress	3.39	3.39	3.40	3.41
Smoking and alcohol	4.09	4.06	4.17	4.18
Medical care	3.40	3.52	3.53	3.57
Total score	3.33	3.39	3.40	3.48

Table (3.38)
Results of One-Way-ANOVA test according to mother's educational level variable

		variable	·		·	
Domain	Source of	Sum of	DF	Mean	F	Sig.*
	variance	squares		square		
Nutrition	Between groups	6.515	3	2.172	7.07	0.000*
	Within groups	323.074	1053	0.307		
	Total	329.589	1056			
Physical	Between groups	10.298	3	3.433	3.48	0.015*
fitness	Within groups	1036.630	1053	0.984		:
	Total	1046.928	1056			
Managing	Between groups	0.035	3	0.011	0.03	0.99
stress	Within groups	349.954	1053	0.332		
	Total	349.990	1056			
Smoking	Between groups	1.834	3	0.611	0.75	0.51
and	Within groups	851.920	1053	0.809		
alcohol	Total	853.754	1056			
Medical	Between groups	5.065	3	1.688	4.05	0.007*
care	Within groups	438.773	1053	0.417	ļ	
	Total	443.838	1056			ļ
Total score	Between groups	2.419	3	0.806	3.95	0.008*
	Within groups	214.943	1053	0.204		
	Total	217.362	1056			

<sup>\*</sup> Significant at ( $\alpha$ =0.05), critical (F) value (2.40).

Table (3.38) shows that there are significant differences at  $(\alpha=0.05)$  on the following domains (nutrition, physical fitness, medical care and total score of health behaviors of the students according to mother's educational level because of computed (F) values at these domains are greater than critical (F) value.

To determine between whom the differences were found Scheffes' post-hoc test was conducted as in tables (3.39), (3.40), (3.41) and (3.42).

Table (3.39)
Scheffes' post-hoc test for the differences of nutrition domain according to mother's educational level variable

Mother's educational level	Preparatory and less	Secondary	Deploma	BA and more
Preparatory and less		- 0.11*	- 0.18*	- 0.19*
Secondary			- 0.07	- 0.08
Deploma				- 0.00
BA and more				

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.39) shows that there are significant differences at  $(\alpha=0.05)$  on nutrition domain according to mother's educational level between:

- \* (Prep. and less) & (Secondary) in favor of secondary.
- \* (Prep. and less) & (Deploma) in favor of deploma.
- \* (Prep. and less) & (BA and more) in favor of BA and more.

Table (3.40)
Scheffes' post-hoc test for the differences of physical fitness according to mother's educational level variable

Mother's educational level	Preparatory and less	Secondary	Deploma	BA and more
Preparatory and less		- 0.10	0.08	- 0.27*
Secondary			0.18	- 0.17
Deploma				- 0.36*
BA and more				

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.40) shows that there are significant differences at  $(\alpha=0.05)$  on physical fitness domain according to mother's educational level between:

- \* (Prep. and less) & (BA and more) in favor of BA and more.
- \* (Deploma) & (BA and more) in favor of BA and more.

Table (3.41)
Scheffes' post-hoc test for the differences of medical care domain according to mother's educational level variable

Mother's educational level	Preparatory and less	Secondary	Deploma	BA and more
Preparatory and less		- 0.12	- 0.13	- 0.17*
Secondary			- 0.01	- 0.05
Deploma				- 0.04
BA and more				

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.41) shows that there is a significant difference at  $(\alpha=0.05)$  on medical care domain according to mother's educational level between: (Prep. and less) & (BA and more) in favor of BA and more.

Table (3.42) Scheffes' post-hoc test for the differences of total score according to mother's educational level variable

Mother's educational level	Preparatory and less	Secondary	Deploma	BA and more
Preparatory and less		- 0.06	- 0.06	- 0.15*
Secondary			- 0.00	- 0.08
Deploma				- 0.08
BA and more				

<sup>\*</sup> Significant at ( $\alpha$ =0.05).

Table (3.42) shows there is a significant difference at ( $\alpha$ =0.05) on total score of health behaviors according to mother's educational level between:\* (Prep. and less) & (BA and more) in favor of BA

# **CHAPTER IV**

Discussion and concluding Remarks

#### 4.1 Level of health behavior

What is the level of health behaviors among Palestinian non-governmental university students in West Bank-Palestine? Data presented in table (3.6) showed that the level of health behaviors of the students on total score was moderate (67.4%).

Such finding could be attributed to lack of attention in the study's plan & syllabus at the schools & universities and also the family in the health awareness & healthy behaviors of the individuals.

Our findings in this respect are in agreement with the findings of previous studies while not agreement with El-Qaderi(1998) study.

This finding could be due to the lack of questions in the study plan about the presence or absence of a health education course among the university students because according to the studies done by (Lottes C R., 1996; Brynteson & Adams 1993 and Jacobi w., 1994) found that the healthy lifestyle behaviors changes at the end of a health education course...

This finding could be attributed also to the absence of activities or health programs that may increase the health knowledge and change the behaviors.

Based on the results in table (3.4), we showed that the level of health behaviors of the students for total score of smoking & alcohol domain was very high (82 %), such finding could be attributed to the good knowledge in negative affects to the smoking habit through the most of the students society and also their knowledge about the harmful results of that habit. Our findings in this respect are in agreement with findings of Abolfotouh et al. Study and disagreement with the National Health Interview Survey.

As for the alcohol it's considered as a heated habit in the Palestinian society especially it's against the religion and the tradition in comparison with most of the previous studies done through European and American

society (e.g., Presley et al., 1993; Wechsler et al., 1994; and Johnston et al., 1995).

This high result (82%) of smoking and alcohol domain could be due to the inclusion of the university students in this study and not college students. Data presented in table (3.2) showed that the level of health behaviors of the students for total score of physical fitness domain was very low (49.8%), such findings could be attributed to ignoring the sporty respect in the universities' plan and sporty activities also. Our findings in this respect are in agreement with the findings of previous studies.

## 4.2 Findings of the second question (Hypotheses)

#### 4.2.1 Health behavior in different university

There are no significant differences at  $(\alpha = 0.05)$  in the level of health behaviors of the students of Palestinian Universities in West Bank due to university variable.

Data presented in table (3.10) showed that there were significant differences at the level of health behaviors of the students according to university variable on the following domains: Nutrition, Physical fitness, Managing stress, Medical care and total score.

Based on tables (3.11,3.13) and 3.15 we showed that all differences were in favor of Arab-American University. Such findings could be attributed to the full intensive semesters which relate to the physical therapy, health culture, health management ...etc. 586538

The small number of the students in Arab-American university in comparison with the other universities which offers more opportunities to exchange information and contact through the students in such subjects.

## 4.2.2 Health behavior and gender

There are no significant differences at  $(\alpha = 0.05)$  in the level of health behaviors of the students of Palestinian non-governmental universities in West Bank due to gender variable.

Data presented in table (3.16) showed that there were significant differences of the level of health behaviors of the students. According to gender variable in all domains and total score between male and female students in favor of female students, while in case of physical fitness domain in favor of male students.

Such findings could be attributed to the attention of the female students of their appearance more than the male also the other things relate to the general health.Our findings in this respect are in agreement with findings of (El-Qaderi 1998; Boutet 1994 and Parsons 1994) studies.

# 4.2.3 Health behavior and place of residence

There are no significant differences at  $(\alpha = 0.05)$  in the level of health behaviors of students of Palestinian Non-governmental universities in West Bank due to residence place variable.

Data presented in table (3.18) showed that there were no significant differences at the level of health behaviors of the students according to residence place variable.

Such findings could be attributed to geography area in the Palestinian Society since the cites and villages are very closed to each other's.

There is Non-gaps between city & village were the Internet Services are extended to cover villages and cities. (ways knowledge are available up to all). Living conditions, variables, and study's plans are the same in both. And because the university student spent long period of his time in the university so, could be able to accept a healthy lifestyle behavior when he in contact

with other individuals in the university, which is mostly in the city areas rather than villages or camps, despite these individuals come from city, village or camps.

## 4.2.4 Health behavior and college

There are no significant difference at  $(\alpha = 0.05)$  in the level of health behaviors of students of Palestinian universities in West Bank due to college variable.

Data presented in table (3.19) showed that there was significant difference at the level of health behaviors of the students according to residence college variable between scientific & Humanity colleges in favor of scientific colleges. Such findings could be attributed to the good knowledge & wider culture of the students in the scientific colleges in health domains more than the other students could from the humanity fields. Our findings in this respect are in agreement with findings of Al-Shammari and Abolfotouh et al. studies.

This significant difference at the level of health behaviors could be due to inclusion of scientific and health related courses during the university time comparing with the Humanity Colleges where they were very far from these health behavior courses or programs as their nature of the courses.

These findings suggest the inclusion of healthy course programs in the Humanity college to increase the knowledge of health awareness and the attendance of a healthy lifestyle behaviors.

#### 4.2.5 Health behavior and educational level

There are no significant differences at ( $\alpha = 0.05$ ) in the level of health behaviors of students of Palestinian universities in West Bank due to educational level variable. Based on the results in tables (3.23, 3.24, 3.25 and 3.26) we showed that all differences were in favor of the lower level.

Such findings could be attributed to, that the students at the first year in the universities are more interested in their appearance, their food, general healthy behaviors more than the students who are in the final years since the latest usually face more pressures and burdens because of the study more than the first type. Our findings in this respect are in agreement with Lau et al. study.

According to educational background, science background student's score is higher than literature background students.

## 4.2.6 Health behavior and cummulation average

There are no significant differences at  $(\alpha = 0.05)$  in the level of health behaviors of students of Palestinian universities in West Bank due to accumulative average variable.

Data presented in table (3.28) showed that there were significant differences at the level of health behaviors of the students according to accumulative average variable on the following domains (Nutrition, managing stress, medical care and total score)

Based on the results in tables (3.29, 3.30, 3.31 and 3.32) we showed that all differences were in favor of the higher cumulative average. It could attributed to; that mostly the students with higher accumulative average are able to accept many of different types of information including such topics that are related to healthy behaviors and are more likely to apply what they did learn on themselves, because they are sure about the importance of such knowledge and also such students with high cumulative averages tends to be the top in every thing related to their behaviors including the healthy behaviors as their high cumulative average indicated their attention to be the top in the university comparing with other students.

## 4.2.7 Health behavior and parents level of education

#### **Seventh Hypothesis:**

There are no significant differences at  $(\alpha = 0.05)$  in the level of health behaviors of students of Palestinian universities in West Bank due to father's educational level variable.

#### **Eighth Hypothesis:**

There are no significant differences at  $(\alpha = 0.05)$  in the level of health behaviors of students of Palestinian universities in West Bank due to mother's educational level variable.

Data presented in table (3.34 & 3.38) showed that there were significant differences at the level of health behaviors of the students according to father's & mother's educational level variable.

Based on the results in tables (3.35, 3.39, 3.40, 3.41 and 3.42) we showed that all differences were in favor of the higher educational level (father & mother).

Such findings could be attributed to: -

Fathers & mothers who are have high qualifications (Bachelor or above), mostly have a high culture which reflects on their sons knowledge & experiences.

In other words the qualified parents have qualified sons and vice versa.

And more over the type of study of the parents or the field in which the parents or one of them employed (especially the mother) may affect the health behaviors of the sons; as a continue source of information about such field such as the health field and related problems such as the knowledge about certain disease (as prevention) tends to affect the attitudes of the sons towards certain unwanted or undesired behaviors. (So the son whose father or mother an economist didn't have the ideal healthy lifestyle behaviors as the son whose father or mother a physician, Nurse or pharmacist).

These significant differences in the level of health behaviors of the students according to father's and mother's educational level reflects that the higher educational level not only control the healthy Lifestyle of their sons but also have an awareness about the preventative medicine and its important role that plays in maintaining the health of their sons.

And as the educational level of the parents increased, their healthy behavior increased and their sons practice and accept these behaviors spontaneously as it is from the great parents.

And as the educational level of the parents increased, they give attention to their sons in different activities in their life especially in education so they attended their sons to have high score in the high school and then they directed them forward scientific colleges, and as we see from this study and the previous studies that there was significant difference at the level of health behaviors of the students according residence college variable between scientific and humanity colleges in favor of scientific colleges.

# 4.2.8 Recommendations and concluding remarks

Based on the study findings the researcher recommended the following:-

- Both Ministries of Education and Health have to collaborate collectively and effectively to provide the Universities libraries with all types of Hygienic circulars, pamphlets, brochures and Medical books and posters which would spread hygiene awareness and enthuse the students for individual reading to gain more health care knowledge.
- It is important that universities curriculum and study plans either of scientific nature or humanity should contain imperative curriculums that deals with the hygiene matters and health culture comprehensively, concentrating on issues pertaining to nutrition, sport activities, medical care and stress management.
- Scope of effective cooperation between Ministries of Education and Health should commence to train university health care groups responsible for the hygiene and health matters enabling them to effectively educate university students through out scholastic years.
- Collaboration of the Three Ministries i.e High Education, Health and Information to spread the awareness pertains to health in general through their enhanced media programmes for the local society and students, in particular universities students, will yield effective and positive results.
- To carry out similar studies and researches on students of both Governmental/Private Universities, Colleges and Institutions in order to visualize the different trends and other changes.
- To do equivalent studies to define the hygienic tendency /atmosphere of the students of different university stages to

diagnose effects of these trends on their hygiene knowledge and practices.

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An-Najah National University
Faculty of Graduate Studies
Public Health Department

Dear students,

The researcher of this questionnaire is conducting a study about the level of health behaviors of the students of the Palestinian non-governmental universities in the West Bank, so this questionniare has been prepared to achieve this goal.

Please answer the questions with objectivity and accuracy since your answers will be used for the purposes of this study.

Thank you very much.

Researcher Mahmoud Jaber

#### Firstly: General Information

*	Universit	y: (		)				
*	Sex	:	□ Male		Fema	ıle		
*	Students'	Re	sidence:	□ Village	C	City	□ Camp	)
*	Faculty:		□ Scient	ific	□ Hu	manity		
*	Education	ıal	Level:	□ First year	r	□ Secon	d year	☐ Third year

	🗆 Fou	ırtlı year	□ Fifth	year
* Students' accumulative aver	rage:	□ (90% and n	nore)	□ (80-89%)
		□ (70-79%)		(69% and less)
* Father's educational level:	□ Pre	paratory and le	ess	
	□ Ge	neral secondar	у □[	Diploma
		o B	Bachelor	and more
* Mother's educational level:	: o F	Preparatory and	less	
		General second	lary	□ Deploma
		□ B	Bacheloi	r and more

**Secondly**: The Questionnaire

Insert (x) where it applies more to you:

	First domain: Nutrition		De	egree of resp	onse	
No.	Items	Very much	much	moderate	little	Very little
1.	I have balanced meals that contain carbohydrates, proteins, vitamins and fat.					
2.	I eat limited quantities of fats.					
3.	I prefer grilled food to fried food.					
4.	I eat salads with the main meals.					
5.	I eat more fresh fruit and vegetables than the canned ones.					
6.	I read labels for information about the nutritional quantity of food.					
7.	I maintain an appropriate weight.					
8.	If I need to decrease my weight,  I avoid eating the food that increases fatness.					
9,	I prefer quick meals to home meals.					

	Second domain: Physical fitness		De	gree of respo	onse	
No.	Items	Very much	much	moderate	little	Very little
10.	I participate in continuous, physical activity for (20-30) minutes or more at least three times per week.					
11.	I follow an exercise program appropriate for my level of fatness.					
12.	I warm up properly before vigorous activity and cool down afterwards.					
13.	I use exercise equipment properly and safely.					
14.	I swim only when others are present.					
15.	I wear highly visible clothing when exercising out doors such as walking, running, or biking.					
16.	I put sports clothes that are suitable for the weather state during exercises.					

	Third domain:		De	gree of respo	nse	
	Stress management					
No.	ltems	Very much	much	moderate	little	Very little
17.	I schedule my day to allow time for leisure activity.					
18.	I get an adequate amount of sleep.					
19.	I express my feelings of anger or anxiety frankly and clearly.					
20.	I say " no" without feeling guilty.					
21.	I make decisions with a minimum of stress and worry.					
22.	I set realistic goals for myself.					
23.	I accept responsibility for my actions.					
24.	I allow myself to cry.					
25.	I seek professional help when stress becomes too dificult to manage.					
26.	I manage stress so that it does not affect my physical well being.					
27.	I discuss problems with friends or relatives.					

	Fourth domain:		De	gree of respo	onse	<del></del>
	Smoking & Alcohol use					
No.	Items	Very much	much	moderate	little	Very
28.	I avoid smoking cigarettes or any other kind.					
29.	I try to avoid inhaling the smoke of others.					
30.	I avoid using illegal substances such as uppers and crack.					
31.	I drink fewer than five alcoholic beverages per week.					
32.	I avoid driving the car or taking it under the influence of alcohol or drugs.					
33.	I avoid taking any kind of activators.				_	

-	Fifth domain:		De	gree of respo	onse	
	Medical care					
No.	Items	Very much	much	moderate	little	Very little
34.	I inform doctors with the		<u> </u>			
	medicines that I take in order					
	to avoid the side effects.					
35.	I follow the doctor's					
	instructions when I take a					
	medical prescription.					
36.	I read the inside leaflet of					<del>  -</del>
	instructions of the medicine					
	before using it.	:	E			
37.	I examine the expiry date of the				<del> </del>	
	medicine before using it.					
38.	I keep the medicine in the place		<del> </del>	1	-	
	described in the leaflet.					
39.	I seek appropriate care as					
	necessary, when I feel un-well					
	or tired.					
40.	I maintain an accurate, written					
	current personal health history.					
41.	I brush my teeth at least once a	<u> </u>				
	day.					
42.	I ask questions of health care					
	providers.					
43.	I use a sun-glass when I spend					
	long time under the sun.					
44.	I avoid incorrect styles of					
	sexual behavior.					
45.	I practice good personal					
	hygiene by bathing daily and					

	washing my hands frequently.				
46.	I have regular medical check		<del>-</del>		
	ups.	i			
47.	I have regular dental check				
7/•	Ü	;			
40	ups.	· -			
48.	I have regular eye			!	
	examinations.				
49.	I am committed with a				
	physiotherapy test for my chest			1	
	to avoid the appearance of any				
	abnormal mark.				
50.	I maintain a dequate health				
	insurance coverage.		1		
51.	I am committed with				
	conducting periodical				
	laboratory investigation				
	especially infectious and				
	hereditary diseases.				
52.	I watch regularly T.V.seminars				
	that are related with public				
	health.				
53.	I read regularly essays that are				
	concerned with environment				
	and public health.				

			جامعة النجاع الوطنية
			كحلية الحراسات العليا
			قماعاا قعسا فسق
			عزيزي الطالبم/ ة
			بعد التعية
بية ،و تم اعداد هذا الاختبار لهذا الغرض ، يرجى	نامعات الفلسطينية في الضفة الغرو	الوعي الصحي لدى طلبة الج	يقوم الباحث بدراسة حول مستوى ا
			الاجابة عن اسئلته بكل موضوعية و د
		مع حزيل الشكر،	
	الباحث		
	محمود حابر		
			أولا:معلومات عامة
		(	• الجامعة: (
أنثى 🗀		ذكر 🗖	
			● الحنس:
مخبم 🗖	مدينة 🔲	□ 4/f	• مكان اقامة الطالب/ة:
انسانیة 🗖 🕏		علمية 🗖	• الكلية:
سنة ثانية 🗀		سنة أولى 🗖	• المسنوى الدراسي:
<b>—</b>	<b>5</b>	Company to the second	

□ (%89~80 <sub>)</sub>	(90%) فأكثر □	<ul> <li>معدل الطالب التراكمي:</li> </ul>
(69%) فما دون□	□(%79-70 <sub>)</sub>	
ثانوية عامة 🔲	اعدادي فأقل 🔲	<ul> <li>مستوى تعليم الاب:</li> </ul>
بكالوريوس فأكثر 🗖	دبلوم 🗖	
لانوية عامة 🔲	اعدادي فأقل 🗖	• مستوى تعليم الام:
بكالوريوس فأكثر 🔲	دبلوم 🗖	

ثانياً: الاختيار

یرحی وضع اشارة (( x )) بما بنطبق علیك:-

مجال	الأول: التغذية		درجة الاست	نجابة		
الرقم	الفقرات	کثیر حدا	كثير	متوسط	قليل	قليل حدا
1	اتناول وحبات غذائية متوازنة تحتوي على كربوهيدرات و بروتينات و					
	فیتامینات و دهون.					
2	أتناول الدهون بكميات محدودة.	-				
3	أفضل الطعام المشوي على الطعام المقلي.					
4	أتناول السلطات مع الوحبات الرئيسية					
5	أتناول الفواكه و الخضروات الطازحة أكثر من المعلمة.		<del></del>			
6	أقرأ قوائم المعلومات عن نوعية التغذية في الاطعمة المعلية.					

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أحافظ على الوزن المناسب لحسمي.	7
اذا احتجت لانقاص الوزن أتحنب تناول الاغذية التي تزيد السعنة.	8
أفضل الوحبات السريعة على الوحبات المتزلية.	9

الججال النا	ابي:النشاط الوياضي	د	درجة الاستجابة				
الرقم	الفقرات	کثیر حدا	كثير	متوسط	قليل	قليل حدا	
10	اشارك في الانشطة الرياضية المستمرة لمدة		-	-			
	(20-20) دفيقة و بما لا يقل عن ثلاث مرات أسوعيا.				_		
11	أتبع برنامجا تدريبيا مناسبا لمستوى اللياقة البدنية.				-		
12	أقوم بعملية الاحماء قبل البدء بالتمرين و التهدئة بعد التمرين.						
13	أستخدم الادوات الرياضية بشكل مناسب و آمن.						
14	أسبح فقط عند حضور الاخرين.		· • • •				
15	أرتدي ملابس رياضية عند التمرين حارج البيت، مع المشي أو						
	الركض أو ركوب الدراحة.						
16	أرتدي الزي الرياضي المناسب للحالة الحوية أثناء التعرين.						

		ستجابة	درجة الاس	)	الث:التحكم بالضغوط النفسية	الجال الث
فليل	فليل	متوسط	كثير	کثیر حدا	الفقرات	الرقم
حدا				!		
					أنظم يومي من أحل توفير وقت للنشاط للتخفيف من	17
					الضغوط النفسية.	
		-			احصل على فنرة كافية من النوم.	18
:			,		اعبر عن الشعور بالغضب أو القلق بشكل واضح و	19
					صريح.	
					أعبر عن نفسي دون الشعور بالذنب.	20
					أتخذ القرار بأقل قدر ممكن من الضغط و القلق.	21
					أضع قرارات حماية لنفسي.	22
					أنقبل مسوليتي عن أعمالي.	23
					أنيح لنفسي المحال للبكاء.	24
					أبحث عن متخصص عندما يكون الضغط النفسي خارج	25
					عن سيطرق.	
					أتحكم بالضغط النفسي لكي لا يؤثر على وضعي الجسمي.	26
					أناقش المشكلاتمع الاصدقاء أو الاقارب.	27

درجة الاستجابة	المجال الرابع:(المنشطات)،الدخان،الكحول،وهواد أخرى

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الرقم	الفقرات	کثیر حدا	كثير	متوسط	قليل	قليل
						حدا
28	أتفادى تدخين السحائر أو أي نوع آخر من أنواع الدخان.					
29	أتجنب تنفس (استنشاق) الدخان من الاخرين.					
30	أتجنب تناول العقاقير الممنوعة مثل الحشيش و الأفيون.					
31	أتناول أقل من خمس مرات كحول كل أسبوع.					
32	أتحنب قيادة السيارة أو ركوهما تحت تأثير أي نوع من أنواع					
	الكحول أو المحدرات.					
33	أتفادى تناول أي نوع من أنواع المنشطات.					

درجة الاستجابة			در ج		لمجال الحامس: العناية الصحية	
قليل حدا	قليل	متوسط	كثير	کئیر جدا	الفقرات	الرقم
1.504		<u> </u>		1	اعلم الاطباء بالادوية التي أتناولها من أجل تعنب الآثار الحانبية.	34
		<u>                                     </u>		-	أتبع تعليمات الطبيب عند أخذ وصفة طبية .	35
				-	أقرأ النشرة الداخلية للدواء قبل استخدامه.	36
			<u> </u>	<u> </u>	أفحص تاريخ انتهاء مفعول الدواء قبل استخدامه.	37
				-	أحفظ الدواء في الاماكن المنصوص عليها في النشره.	38
					ابحث عن العناية الصحيةالمناسبة عند الشعور بعدم الارتباح.	39
					احتفظ لنفسي بناريخ صحي، شخصي دقيق.	40
	<u>.</u>				أنظف اسناي مرة واحدة في البوم علىالاقل.	41
			_		اسأل المتخصصين أسئلة متعلقة بالنعابة الصحية.	42
					استحدم النظرات الشمسية عند قضاء وقت كبير تحت الشمس.	43
					انجنب انماط السلوك الجنسي غير السليمة.	34
					امارس عادات صحبة سليمة وذلك بالاستحمام يومياً وغسل	45
					اليدين باستمرار.	
					النزم بالفحوصات الطبية المنتظمة.	46
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					التزم بفحص العبون المنتظم.	48
					النزم بفحص طبيعي للصدر لعدم بروز أية علامة غير عادية.	49
					أحافظ على تأمين صحى شامل	50
					الترم بإجراء فحوصات مخبرية دورية وخاصة الني لها علاقة	51
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					أتابع بانتظام الاطلاع علىالمقالات الني تعنى بالبيئة والصحة	53
					العامة.	

شاكرين لكم حسن تعاونكم