

## Evaluation of Quality of Life for Secondary School Students in Kirkuk City

### تقويم جودة الحياة لطلبة المدارس الثانوية في مدينة كركوك

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#### المستخلص:

الأهداف: تهدف الدراسة إلى تقويم جودة الحياة لطلبة المدارس الثانوية في مدينة كركوك بالإضافة إلى إيجاد العلاقة بين هذه الجودة لهؤلاء الطلبة وبعض الخصائص الديموغرافية مثل العمر والجنس والسكن والمستوى التعليمي للأبوين والحالة الاقتصادية المنهجية: أجريت دراسة عرضية على عينة عنقودية مكونة من (100) طالب وطالبة تتراوح أعمارهم بين (13-24) سنة من المدارس الثانوية في مدينة كركوك وللفترة من السابع من تموز 2014 ولغاية السابع من أيار 2015، ولغرض جمع المعلومات صممت إستمارة إستبطنية مكونة من ثلاثة أجزاء: الجزء الأول شمل الخصائص الديموغرافية ويتضمن من (7) فقرات والجزء الثاني شمل الخصائص الطبية ويتضمن من (3) فقرات والجزء الثالث ويشمل جودة حياة الطلبة ويتكون من (25) فقرة. بطريقة المقابلة الشخصية مع عينة البحث جمعت البيانات وتم تحليلها باستخدام أسلوب التحليل الإحصائي الوصفي والذي يشمل التوزيع التكراري والنسبة المئوية والوسط الحسابي للقيم، وإسلوب التحليل الإحصائي الإستنتاجي والذي يشمل اختبار مربع كاي والاختبار التائي وتحليل التباين باستخدام برنامج الحزم لإحصائية العلوم الاجتماعية (SPSS) النسخة السابعة عشرة.

النتائج: أظهرت النتائج بأن أغلب أعمار الطلبة كانت بين (17-20) سنة وتمثل (65%) و(53%) من العينة لثنى فتيات. فيما يتعلق بالسكن، فإن (88%) كانوا يعيشون في المناطق الحضرية. إستنتجت الدراسة وجود علاقة قوية بين جودة الحياة للطلبة وأعمارهم.

التوصيات: أوصرت الدراسة إلى ضرورة وجود موظف خدمات اجتماعية في المدرسة يقوم على حل مشاكل الطلبة. بتسريع مركز حديث للإباء والأمهات لتعليمهم حول احتياجات الطلبة. يحتاجون منهج المدارس الثانوي يجب أن يتضمن المنهج الدراسي للمدارس الثانوية المواضيع التي تتعلق بجودة الحياة.

#### Abstract

**Objective(s):** To evaluate the quality of life among secondary and to find out the relationship between students' quality of life and their socio-demographic characteristics of age, gender, residence, marital status, father's and mother's education, and family financial status in Kirkuk City.

**Methodology:** A cross-sectional study is conducted on (100) student who are boys and girls aged (13 to 24) years old. These subjects are studying at secondary schools in Kirkuk City. The study is carried out at secondary schools in Kirkuk City from 7<sup>th</sup> July 2014 to May 7<sup>th</sup> 2015. A questionnaire is constructed for the purpose of the study which is consisted of three parts: The first part includes the demographic data (7) items, the second part is concerned with the medical data which is consisted of (3) items and the third part is dealing with the quality of life of students which is consisted of (25) items to evaluate the quality of life among these students. Data are collected through the use of the questionnaire and the interview technique. They are analyzed through the application of descriptive statistical analysis approach which includes frequency, percentage, mean and mean of scores and inferential statistical data analysis approach which includes chi-squared test, T-test and analysis of variance (ANOVA) by using the statistical package of social science (SPSS) version (17).

**Results:** The study find that most of the students are between (17-20) years old who are accounted for (65%). The results depict that (53%) of the sample is girl. With regard to their residence, (88%) of them are living in urban areas. Also the study concludes highly significant relationship between the quality of life of these students and their age.

**Recommendations:** The study recommends that social worker should be present in schools in order to solve their problems. New center, for fathers and mothers, should be established to teach them about how to deal with the students' needs. Secondary school curriculum should include topics concerning the quality of life for these students.

**Keywords:** Evaluation, Quality of Life, Secondary School Students

**Introduction:**

The Quality of life has been defined as a broad ranging concept affected in a complex way by such things as physical health, psychological state, level of independence, social relationship to the environment. This definition lays emphasis on the subjective nature of quality of life, and also on the need to explore all those factors considered to have a significant impact on quality of life<sup>(1)</sup>.

Health related quality of life (HRQOL) has joined morbidity and mortality as a health outcome of interest in recent years, much of the research on the HRQOL benefits of physical activity has focused on populations with specific disease states, e.g. coronary heart disease, osteoarthritis, kidney disease, and liver disease<sup>(2)</sup>.

The measures of health related quality make to describe their experiences of health and illness, this feature is what distinguishes them from measures of disability, which enquire about the ability to complete specific tasks such as climbing stairs or dressing oneself. Health Related Quality of Life (HRQOL) is a broader concept concerned with whether disease or impairment limits ones' ability to fulfill a normal role (for example, whether the inability to climb stairs limits one at work). However, the measures do not consider how people arrive at these judgments. Understanding mechanism through which health, illness, and health care interventions influence quality of life (i.e., the determinants of health related quality of life)<sup>(3)</sup>.

Adolescent generally begins with puberty and encompasses the ages between 10 and 24; it consists of early adolescence (10-14 age), middle adolescence (15-17 age), and late adolescence (18-20 age). Many young people engage in a wide range of unhealthy habits, such as inadequate nutritional intake, rest and exercise, as well as risk behaviors, such as tobacco and drug use that lead to adverse health outcomes. Greater awareness of lifestyle factors offers major advantages. Lifestyle factors can be potent in determining both physical and mental health. In modern

affluent societies, the diseases exacting the greatest mortality and morbidity such as cardiovascular disorders, obesity, diabetes, and cancer—are now strongly determined by lifestyle. Differences in just four lifestyle factors—smoking, physical activity, alcohol intake, and diet—exert a major impact on mortality, and “even small differences in lifestyle can make a major difference in health status<sup>(4)</sup>.”

**Methodology:**

A cross-sectional study is conducted on a cluster sample of (100) students who are ranging in age from **13 to 24** years old. These students are studying at secondary schools in Kirkuk City from July 7<sup>th</sup> 2014 to May 7<sup>th</sup> 2015. The study aims at evaluating the quality of life for secondary schools' students in Kirkuk City. Through extensive review of relevant literature, a questionnaire is constructed for the purpose of the study. The questionnaire is comprised of three parts. **Part I:** this part is consisted of (7) items which are focusing on the students' demographic characteristics of age, gender, residence, marital status, father's and mother's education, and family financial status. **Part II:** This part is consisted of (3) items which are dealing with the medical information. **Part III:** This part is consisted of (25) items which are measuring the quality of life. Overall items included in this part are scored and rated as (1) for never, (2) for Sometimes and (3) for always. Internal consistency reliability is determined for the study instrument with Cronbach alpha correlation coefficient of ( $r=0.85$ ) for the internal scale and content validity is determined through panel of experts. Data are collected through the use of the constructed questionnaire and the interview technique as a means of data collection. Data are analyzed through the application of descriptive statistical analysis approach which includes frequency, percentage, mean and mean of scores and inferential statistical data analysis approach which includes chi-squared test, T-test and analysis of variance (ANOVA) by using the statistical package of social science (SPSS) version (17) at ( $P\text{-value} \leq 0.05$ ). Mean of scores is measured as **Highly significant** =  $\geq 2.4$ , **Moderate** = 1.7-2.3, and **Low** =  $\leq 1.6$ .

**Results:****Table (1): Distribution of the sample according to the socio-demographic characteristics (N=100)**

Socio-demographic characteristics	Frequency	Percent
<b>Age</b>		
13-16years	29	29.0
17-20years	65	65.0
21-24years	6	6.0
<b>Total</b>	100	100.0
<b>Gender</b>		
Boy	47	47.0
Girl	53	53.0
<b>Total</b>	100	100.0
<b>Residence</b>		
Urban	88	88.0
Rural	12	12.0
<b>Total</b>	100	100.0
<b>Marital status</b>		
Single	100	100.0
Married	0	0
<b>Total</b>	100	100.0
<b>Father's Education</b>		
Unable to read and write	1	1.0
read and write	13	13.0
Primary school graduate	8	8.0
Intermediate school graduate	7	7.0
Secondary school Graduate	30	30.0
Institute	12	12.0
College	29	29.0
<b>Total</b>	100	100%
<b>Mother's Education</b>		
Unable to read and write	10	10.0
read and write	4	4.0
Primary school graduate	16	16.0
Intermediate school graduate	13	13.0
Secondary school graduate	20	20.0
Institute	24	24.0
College	13	13.0
<b>Total</b>	100	100%
<b>Family Financial Status</b>		
Poor	6	6.0
Middle	36	36.0
Good	41	41.0
Very Good	17	17.0
<b>Total</b>	100	100.0

This table demonstrates the socio-demographic characteristics of the whole study sample. The results indicate that the high percent of students' age is between (13-24) years and constitute (65%). Also the results present that (53%) of sample were girl. With regard to their residence, (88.0%) are living in urban areas. The entire

sample is single and constituted (100%). Concerning father educational level, (30%) of the sample are secondary school graduates and (30%) are college graduate while (24 %) of the mothers are institute graduates. The financial status of the family depicts that (41 %) of sample have good financial status.

**Table (2): Mean of Scores for Quality of Life Items**

List	Items	Always		Some time		Never		MS	Severity
		F	%	F	%	F	%		
1	Do you feel that your life is enjoyable?	16	16.0	70	70.0	14	14.0	2.0	Moderate 50
2	Do you feel positively about your future?	40	40.0	50	50.0	10	10.0	2.3	Moderate 57.5
3	Do you have good feeling in your life?	41	41.0	50	50.0	9	9.0	2.3	Moderate 57.5
4	Do you have efficiency in your life?	80	80.0	16	16.0	4	4.0	2.7	Highly Significant 67.5
5	Do you feel frustrated about how you live?	11	11.0	65	65.0	24	24.0	1.8	Low 45
6	Do you feel anxious?	22	22.0	68	68.0	10	10.0	2.1	Moderate 52.5
7	Do your sadness impact on daily activity?	29	29.0	62	62.0	9	9.0	2.2	Moderate 55
8	Do you feel isolated?	17	17.0	52	52.0	31	31.0	1.8	low 45
9	Do you feel safe in your life?	48	48.0	31	31.0	21	21.0	2.2	Moderate 55
10	Do your life sites provide rest for you?	61	61.0	31	31.0	8	8.0	2.5	Highly Significant 62.5
11	Do you have financial problem?	10	10.0	26	26.0	64	64.0	1.4	Low 35
12	Do you reach primary health easily?	45	45.0	37	37.0	18	18.0	2.2	Moderate 55
13	Do you feel that you are neglected?	10	10.0	50	50.0	40	40.0	1.7	Moderate 42.5

Table To be Continued

14	Do you depend on your friends?	41	41.0	48	48.0	11	11.0	2.3	Moderate 57.5
15	Are you satisfied about your sleep?	30	30.0	46	46.0	24	24.0	1.9	Moderate 47.5
16	Are you satisfied about your ability?	56	56.0	35	35.0	9	9.0	2.4	Highly Significant 60
17	Do you feel satisfied about family support?	69	69.0	27	27.0	4	4.0	2.6	Highly Significant 65
18	Are you satisfied about friends' support?	29	29.0	62	62.0	9	9.0	2.2	Moderate 55
19	Are you satisfied about your ability in decision making?	44	44.0	50	50.0	6	6.0	2.3	Moderate 57.5
20	Are you satisfied about Team teaching?	30	30.0	41	41.0	29	29.0	2.0	Moderate 50
21	Are you satisfied about healthy service which is introduced to you?	28	28.0	45	45.0	27	27.0	2.0	Moderate 50
22	Are you satisfied about your class room environment?	13	13.0	34	34.0	53	53.0	1.6	Low 40
23	Are you satisfied about your study environment in your home?	54	54.0	38	38.0	8	8.0	2.4	Highly Significant 60
24	Are you satisfied about your nutrition?	64	64.0	29	29.0	7	7.0	2.5	Highly Significant 62.5
25	Does your religious faith give you strength to face problems?	44	44.0	49	49.0	7	7.0	2.3	Moderate 57.5

$$X^2_{\text{Observed}} = 57.781 \text{ Degree of Freedom} = 4 \text{ } X^2_{\text{Critical}} = 15.51$$

**Highly significant** =  $\geq 2.4$ , **Moderate** = 1.7-2.3, **Low** =  $\leq 1.6$

This table indicates that the mean of scores is moderately significant on items (1,2,3,5,7,8,9,12,13,14,15,18,19, 20,21 and 25) , low significant on items (11 and 22) and highly significant on items (4,10,16,17,23 and 24).

Table (3): Quality of life for Primary School Students

List	Scale	Quality of Life	Number of Students
1	40-49	Low	16
2	50-59	Moderate	60
3	$\geq 60$	High	24

This table depicts that most of the students have experienced moderate level quality of life.

**Table (4): One-way Analysis of Variance for the Difference between Students' Quality of Life and Their Age**

Categories	Source of variance	Sum of square	Mean of square	F Observed
Quality of life	Between Groups	148.668	74.334	Significant
	Within Groups	1850.969	19.281	
	Total	1999.636		

F Critical = 2.99, Degree of freedom= 98

This table shows that there is significant difference between students' quality of life and their age at probability level of  $\leq 0.05$ .

**Table (5): T-test for Comparison between Students' Quality of life regarding to Their Gender**

Category	Gender	Number	Mean	Standard Deviation	T Observed	Probability level $\leq 0.05$
Quality of life	Male	47	53.8936	4.00127	1.765	Not Significant
	Female	52	55.4808	4.85269		

T critical = 1.96, Degree of freedom=98

This table depicts that there is no significant difference between students' quality of life regarding to their gender at probability level of  $\leq 0.05$ .

**Table (6): One-way Analysis of Variance for the Difference between Students' Quality of Life and Father's and Mother's Education**

Category	Source of variance	Sum of square	Mean of square	F Observed
Quality of life	Between Groups	70.109	11.685	Not Significant
	Within Groups	1929.527	20.973	
	Total	1999.636		

F Critical = 2.99 Degree of freedom= 98

This table presents that there are no significant differences between students' quality of life items and father's and mother's education at probability level of  $\leq 0.05$ .

**Table (7): One-way Analysis of Variance for the Difference between Students' Quality of life and Family Financial Status**

Category	Source of variance	Sum of square	Mean of square	F Observed
Quality of life	Between Groups	29.467	9.822	Not Significant
	Within Groups	1970.170	20.739	
	Total	1999.636		

F Critical = 2.99, Degree of freedom= 98

This table reveals that there is no significant difference between students' quality of life and their family financial status at probability of  $\leq 0.05$ .

**Discussion:****Part I: Discussion of Students' Socio-demographic Characteristics**

Analysis of such characteristics depicts that high percentage of the students' age is (17-20) years which constitutes to (65 %) of the total sample (Table 1). This finding can be interpreted in a way that the vast majority of students in our nation have age of (15-20) years.

The results reveal that most of the students are girls and constitute to (53%) of the total sample (Table 1). This finding provides evidence that the number of girls is more than males in our nation. The results also show that (88%) of them are living in urban areas (Table 1). In addition, it appears that all of the sample is single and constitute (100%) because this age is considered not the perfect age for marriage (Table 1).

Concerning parents' education, (30%) of the sample are secondary school graduates and (30%) are college graduates. While (24 %) of mothers are institute graduates. In a study about health promoting quality of life and its related factors adolescent Girls. It has been found that most of mothers (32.4%) and fathers (30.5%) had high school diploma. Of the mothers, (77.7%) are housewives and (49.4%) of the fathers have no governmental jobs and (77%) of these parents have enough income for their lives<sup>(5)</sup>.

With regard to family financial status, Most of the students (41.0 %) have good financial status ( Table 1).

It has been reported that many factors impact on quality of life of secondary sustainable consumer behavior can be influenced by personal capabilities, for example financial resources, literacy, skills and knowledge, as well as social status. Finally, behavior often occurs as a habit or routine, which will be more or less difficult to change<sup>(6)</sup>.

**Part II: Secondary Schools Students' Quality of Life**

Throughout the course of data analysis, the study findings indicate that the mean of scores is moderately significant on items (1,2,3,5,7,8,9,12, 13,14,15,18,19, 20,21 and 25) , low significant on items (11 and 22) and highly significant on items (4,10,16, 17,23 and 24) (Table 2). These findings present evidence that most of the students have experienced moderate quality of life.

A study finds that the mean age of subjects is  $15.51 \pm 0.98$  and the mean score of life style was  $63.92 \pm 12.01$ . The highest score of life style subscales is allocated to the spiritual growth or life-appreciation ( $77.66 \pm 15.56$ ) and the least to the physical and sport activities ( $51.66 \pm 22.49$ ). There is a significant relationship between the life style score of adolescents with parents' educational level (mother  $P=0.024$ , father  $P=0.014$ ). However, no significant relationship is found between adolescents' life style and their residential area and also parent's job. Among different dimensions of life style, the highest correlation is seen between spiritual growth and life style total score ( $P=0.01$ )<sup>(7)</sup>.

It has been stated that the healthy life style has been considered as a valuable source for decreasing health problems, promoting health, managing stressful events and improving the quality of life<sup>(8)</sup>.

In a study which is conducted to determine the Secondary school students quality of life status and its related factors among the students primary school, the results suggest that these students have inappropriate physical activity patterns, poor dietary habits, and unfavorable lifestyle associated with parental education, and the results also indicate that there is a stronger correlation between tension

parental education and stress control and lifestyle<sup>(9)</sup>.

It has been mentioned that the basic data on education, employment, and reproductive health among Secondary school students and shows that they are not receiving the adequate schooling and capability building to equip them for the future. It also follows from the Mensch et al. characterization of adolescence that the period of transition to adulthood must equip young people with the education, skills, decision-making power, and information to function as responsible adults in society<sup>(10)</sup>.

Adolescents are a unique population with specific health concerns and needs. Secondary school students are the peak age of onset for serious mental illness like depression and psychosis. Over load of stress from physical, emotional, social and sexual change makes adolescents overloaded with stress which can result in anxiety, withdrawal, aggression, poor coping skills and actual physical illness<sup>(11)</sup>.

Adolescence often turns away from parents and health care providers towards peers for support and guidance. Nonetheless, a brief look at the available information is therefore important in our pursuit of identifying and highlighting the health, lifestyle and behavioral issues and recommends possible ways to deal with them, so as to promote a healthier lifestyle in this population. The purpose of the study was to elucidate the lifestyle and behavior of adolescents in the country and identify the major health risk behaviors in this age group<sup>(12)</sup>.

Concerning the students' quality of life, findings reveal that most of the students have experienced moderate quality of life (Table 3).

This result is in agreement with that of a study which is conducted on quality of life domain for secondary school students and find the quality of life impacted by life events and were moderate impact in some

domains while highly in others domains the independency domain were moderate significant<sup>(13)</sup>.

In a study, it has been reported that the highest score is related to quality of life domain for secondary school students and are impacted by life events<sup>(14)</sup>.

In United Arab Emirates, they find that quality of life for secondary school students is impacted in girls and boys. But, studies in Western countries suggest that girls and women are more affected by emotion and this is reflected in their quality of life<sup>(15)</sup>.

In Lebanon, It is found that Lebanese female students are more likely to engage in emotional and behaviors which have been linked to eating disorder psychopathology than their counterparts from Cyprus and lead to poor quality of life<sup>(16)</sup>.

### **Part III: The Relationship between Secondary Schools Students' Quality of Life and Their Demographic Characteristics**

It has been noticed through the data analysis that there are significant differences between the secondary schools students' quality of life and their age at probability level of  $\leq 0.05$  (Table 4). These findings have disagreed with that of others' work which indicates no relationship between total score of quality of life and age and residential place<sup>(7)(8)</sup>. In another work, negative significant correlation between quality of life and age is determined<sup>(9)</sup>.

It has been reported that there is no significant relationship between quality of life and age<sup>(17)</sup> and no significant relationship between quality of life and age<sup>(18)</sup>, as well as negative significant correlation between quality of life and age<sup>(19)</sup>.

Relative to parents' education, the study finds father's and mother's education do not make any influence on students' quality of life at probability level of  $\leq 0.05$  (Table 5). These findings disagree with others



work that finds a significant relationship between quality of life and parent's educational level<sup>(13)</sup>. Other people's work has determined a significant relationship between quality of life and fathers' level of education<sup>(7)</sup> and mothers' level of education<sup>(13)</sup>.

In a study on health promotion behaviors and high risk behaviors of Turkey young people, the findings reveal that students of highly educated mothers has high quality of life than students whose mothers are low educated<sup>(13)</sup>. A significant relationship between quality of life of secondary school students and educational level of mothers<sup>(14)</sup> and educational level of fathers<sup>(20)</sup> is found.

In a study on quality of life of secondary school students and high risk behaviors of Turkey young people, the mean score of responsibility for health subscale in students with higher educational level of mothers is significantly higher than student whose mothers had lower educational level<sup>(21)</sup>

Regarding to family financial status, the findings depict that there are no significant differences between students' quality of life and their family financial status at probability level of  $\leq 0.05$  (Table 6). The explanation of this result related to good income of the families there for don't impact on quality of life.

A population-based study highlights potential roles for family factors and parent behaviors in influencing dietary patterns. The 'healthy' dietary pattern was positively associated with better family functioning, independent of family income and maternal education. Other studies have shown poor family functioning to be associated with obesity in adolescents<sup>(22)</sup>.

### Recommendations:

1. Social worker should be present in schools in order to solve students' problems.
2. Establishing modern center to fathers and mothers of students to teach them about how to deal with students' needs.

3. Secondary school curriculum should include topics concerning students' quality of life.
4. Further studies can be conducted on large sample size and wide range scale characteristics.

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