The impact of siege on prevalence of depression and anxiety disorder among universities students in Gaza governorates

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Abstract

Aim: The study aimed to examine the impact of the siege on the mental health (anxiety and depression) of universities students in Gaza Strip.

Subjects: The sample consisted of 392 students from the four universities in Gaza strip by representative sample of 183 males and 209 females. The researcher used analytical descriptive design to represent the entire population of the study.

Instruments: The researcher used modified questionnaires and scales to achieve the
goal of the study such as socioeconomic questionnaire prepared by the researcher; Siege
Checklist by (GCMHP); Taylor Manifestation Anxiety Scale (TMAS); and Beck Depression
Inventory (BDI-2).

Results: The results showed that 166 (42.3%) had moderate anxiety, and 62 (15.8%) of had severe anxiety. While 146 (37.2%), had moderate depression, and 12 (3.1%) of them were had sever depression. The results indicated that there were positive significant correlation between siege, anxiety and depression among the universities students. In addition, found that a significant difference in siege and depression according to sex of the study sample in favor of males. While the result found no significant differences in anxiety according to sex of the study sample.

There were a significant difference in total siege and anxiety according to the type of university of Al Aqsa, Al Quds Open and Al Azhar universities.

Conclusion: The siege has several dangerous effects on social, political, economical, educational, as well as psychological impacts. The siege limits the entrance of medical equipments and instruments, drugs and medication, goods, and all life basics. Furthermore, the limited resources in Gaza strip due to siege created socio-economical gap in all life walks. The Palestinian people suffer from poverty, low income, and high prices for every thing they want to achieve. The dramatically changes that occurred due to siege were severe and unbearable in short time which deteriorated all aspects of life inside Gaza Strip. Also, the universities students were considered the most significant group among Palestinian people who complain of several limitations and shortages due to siege that affected these groups. These groups represent the highest cluster among Palestinian people whom suffer of a great anxiety and depression and other mental health problems as a result of confirmed siege on Gaza Strip.

Key words: Siege of Gaza, University Students, anxiety, depression.

اثر الحصار على مدى انتشار الاكتئاب والقلق بين طلبة الجامعات الفلسطينية في قطاع غزة الملخص:

الهدف: هدفت الدراسة إلى التعرف على أثر الحصار على الصحة النفسية (القلق والاكتئاب) لدى طلبة الجامعات الفلسطينية في غزة.

العينة: اشتملت عينة الدراسة على 392 طالب وطالبة من الجامعات الأربع في قطاع غزة بواقع 183 طالب, و 209 طالبة. استخدم الباحث المنهج الوصفي التحليلي لعرض البيانات الخاصة بمجتمع الدراسة.

المقاييس: استخدم الباحثان عدة مقاييس معدلة ومتلائمة مع غرض وهدف الدراسة منها: مقياس الحرف الخالة الاجتماعية (إعداد الباحث)؛ قائمة الحصار (برنامج غزة للصحة النفسية)؛ مقياس اعرض القلق (تايلور)؛ ومقياس بك للاكتئاب.

النتائج: أظهرت النتائج أن 156 (39.8%) يعانون من قلق خفيف, 166 (42.3%) يعانون من قلق متوسط, 62 (42.3%) يعانون من متوسط, 62 (42.3%) يعانون من المتئاب متوسط, 12 (37.2%) يعانون من اكتئاب متوسط, 12 (33.2%) يعانون من اكتئاب شديد.

كما أظهرت النتائج أن هناك علاقة ارتباطيه موجبة بين الحصار, القلق , والاكتئاب بين طلبة الجامعات الفلسطينية في قطاع غزة. كما أفادت النتائج أن هناك علاقة ذات دلالة إحصائية في كل من الحصار والاكتئاب تبعا لمتغير الجنس لصالح الذكور من أفراد العينة. بينما لا توجد علاقة ذات دلالة إحصائية في القلق تبعا لمتغير الجنس بين أفراد العينة.

كما أظهرت النتائج بان هناك علاقة ذات دلالة إحصائية لكل من الحصار والقلق تبعا لمتغير نوع الجامعة لصالح جامعة القدس المفتوحة, وجامعة الأقصى, وجامعة الأزهر.

الخلاصة: لقد خلصت الدراسة إلى أن للحصار تأثيرات كبيرة على جميع نواحي الحياة في قطاع غزة, و يشمل ذلك الحياة النفسية. إن للحصار تأثيرات كبيرة و كذلك الحالة النفسية. إن للحصار تأثيرات كبيرة تتمثل في منع دخول الادوية و المعدات الطبية, و البضائع المختلفة مما أدي الي ازدياد المعانة للفلسطينيين في قطاع غزة. و يعتبر طلاب الجامعات من الفئات التي تضررت نتيجة لفقدان العمل لمعيل الأسرة و الفقر و عدم القدرة على دفع رسوم الجامعات مما أدي إلي ظهور أعراض القلق و الأكتئاب لديهم؟

Introduction

People are differ in living stander from those are satisfy with little living in a calm happy life with quietness and safety and some of who are not satisfy and running behind world while they have much more than even they make security through power. In our lovely home we have a good promise youth who will carry on themselves to build our civilian nation and future. We have many thousand of university students whom they are our hope for present and future in a situation of secure, monitory, and manner stability.

In this our area-Gaza Strip- siege with most of its types are assignment strongly which affect negatively monitory economically and psychological on our students in universities in Gaza Strip. Siege as language is monopolizing and limiting needs through deconstructed behavior or dealing. Siege as meaning on obstacles punishment in a varieties ways on people, countries, group of people, or communities and companies, done by power countries for their own and properties mostly injustice. The siege had strong impact on the Palestinian children in Gaza strip that they were complaining of various emotional and behavioral problems that encounter them and their parents (Abu-Hein, 2008).

The Gaza Strip has two main crossings that connect it to the whole world, Rafah in the south (To Egypt)(and Erez in the north (to Israel). There are three other crossings that are used to exchange goods and bring in food to the Gaza Strip; today all are closed partially or completely . The siege that was imposed on the Gaza Strip has created excessive loss and damage in the different aspects of Palestinian life.

The Gaza Strip has turned into a huge prison with no access to the outside world. Israel has subjected the Gaza Strip to a series of collective punishment measures, the main of which is imposed strict siege on the movement of people and goods.

The suffocating siege imposed on the Gaza Strip leading to disastrous consequences to the physical and mental health of the citizens. The serious consequences of the blockade on the psychological, social and the Palestinian society, where the lead to increased rates of mental disorders in general terms commonly depression, anxiety and psychological disorders caused by physical psychological reasons, as well as contribute to satisfactory setbacks widely among psychopaths. Qouta said; the most powerful results of the study were the negative indicators particularly on children, the sick, students and the unemployed, which were reflected on their behavior and the exacerbated tensions and disturbances (Qouta & Kassab, 2008).

These emotional suffering reflect itself in the high level of domestic violence and clan and the community in general. As well as strengthen the sense of anger and resentment at the international community is unable to intervene just to establish a people and their legitimate rights including their right to self-determination and establish a Palestinian stat with sovereignty over its land natural confiscation. Furthermore, the educational system in Gaza has also been affected by the siege. With the start the new school year, there has been a serious lack of books and shortage of the raw materials needed for printing. According to the United Nations Relief and Works Agency (UNRWA), one-third of students started the school year without the needed text books.

The closures also deprived thousands of students from reaching their universities outside the Gaza Strip. Thousands of students are not allowed to join their universities in the West Bank or abroad due to the siege. Palestinians have gone through repeated traumas of death and destruction of home and life over the past few decades.

The current siege provokes the previous traumas making people re experience the negative feelings that they have previously encountered and passed through. The effects of the siege and blockade on the Palestinian family have different effects 99% found the prices highly risen compared to previously situations, 87% social relation ceased, where psychologically symptoms that most commonly 23% neurological, 17.2% quickly and harassment by initiation, 14% feeling malaise, and 16.2% transitional feature of anger (Thabet , 2008).

The effects of the siege on mental health

Few studies were carried out investigate such unique phenomena of collective punishment of one and half million people. At the psychological and emotional levels, the closure results in psychological pressure and frustrations. Individuals interact with these frustrations and pressures differently according to their bio-psychosocial factors. There are primary reactions such as changes in habits and behaviors and daily routine of the individual including; excessive smoking and alcohol consumption, and excessive eating or lack of it, and excessive or lack of sexual activities.

Nasrallah (2008) who studied "the impact of the Israeli siege on the cultural situation in Gaza provinces". the results of the study showed that the siege had a negative effects. where the acquisition of books had stopped for most of public libraries and the loan services and many others. Also the theatre work reduced from the number of plays and presented shows. The artists production had been effected from their production and participation in exhibitions and workshops for Foreign Affairs.

Nilsson (2008) Who aimed to highlight the constant human rights violations the Palestinian children are subjected to under the siege because the violence and destruction create deep seated psychological consequences that deeply affect the behaviour of the children in fundamental ways. The researcher concluded that to live with constant violence leads to much confusion for children since they live with a confusion they might not understand. The lack of protection for children indicates that there is an acceptance of the violence which also creates confusion. It has been shown that children growing up with so much uncertainty as in Gaza become aggressive, extremely disobedient or compliant.

Taatgen & Kapka (2008) studied the siege and the obstruction right for education and provided a rationale for the creation of a lobby group of educators for international education in Gaza. The authors postulate that every child has a right to an education, and every open society has the duty to provide its children with access to international education. In spite of the obstacles, we left Gaza more convinced than ever that international education should be part and parcel of Gaza's creation and development as an independent state .The siege must surely rank as the largest obstacle to achieving this goal. A country that is occupied cannot properly educate its children.

Fox (2008) studied "Palestinians Under Siege: A Critical Psychology Perspective on Mental Health and Justice". The author discussed the drastic mental health consequences of living under siege are well-known. Although, specific outcomes vary according to local conditions, besieged communities around the globe experience lethal combinations of restricted movement, physical violence, hunger and disease, and disruptions to schools, hospitals, welfare support systems, and other public and community institutions. In whatever combination these and other factors arise, the common result is widespread mental distress.

Thabet et al (2008) in a study aimed to investigate the impact of the siege of Gaza strip on the Palestinian feelings of anger and anger state in relation to psychological symptoms. They found that the most common impact of the siege of Gaza items were: prices were sharply increased (97.67%); I feel I 'm in a big prison (92.23%); and I cannot find things I need in the market (91.70%). The results showed that female reported more summarization, obsessive compulsive disorder, and phobic anxiety. Also, Palestinian who live in camps reported more psychological problems, depression symptoms, anxiety, and hostility. However, psychosis symptoms were more common in people who live in villages than in camps or cities. People with who reported high siege scores were correlated positively with high psychopathology including anxiety and depression.

Thabet et al (2009) aimed to study the ways of coping in Palestinian families exposed to siege and stress and mediating effect of coping on mental health problems. They found that the most common impact of siege of Gaza items were: prices are sharply increased (90.8%), I feel I am in a big prison (88.5%), I can not find things I need in the market (91.70%), I was not able to get specific medicine for me or for one of the family member due to shortage of fuel and absence of transportation (73.4%), and I was not able to get specific medicine for me or for one of the family member due to shortage of physicians and nurses (62.58). Each participants reported from 2-20 items of siege with mean siege scores of 10.83 (SD = 4.07). The results showed that people with monthly income less than 350 US \$ were more affected by siege that the other groups. The most common

psychological problems were: Crying easily (21.7%), difficulty falling asleep (16.8%), worrying too much (16.3%), headaches (15.2%), and feeling tense (15.2%). The results showed than mean HSCL was 53.82, mean anxiety subscale scores was 21.70, and mean depression subscale scores was 32.11 (SD = 8.59), 139 of participants (75.5%) rated as psychiatric cases and 45 were not cases (24.5%). People live in cities reported mental health problems less than those live in villages and camps. Also, the results showed that people with monthly income less than 350 US \$ showed more mental health problems than the other two groups were more affected by siege that the other groups.

The study aimed to assess the effects of the siege on mental health of universities students in Gaza Strip.

Methodology

Subjects

A simple random sample was selected depending on EPI-6 from total number of 57,468 students from Gaza Universities. The proportional ratio was taken among universities (Al Aqsa, Islamic, Al Azhar, and Al Quds Open) as well as the students (male and female). The total number of students was 392 students.

Instruments

The researchers used the following instrument:

Socio-economic questionnaire

This questionnaire developed by the researchers to assess the students' age, gender, name of the university, place of residence, number of family member, father employment and education, mother employment and education, and family income.

Siege Checklist (GCMHP, Thabet et al, 2008)

Siege checklist developed by Community Mental Health Program to assess the siege effects on the Palestinian people who experience persistent siege. This scale consisted of 21 item regarding the daily life living of Palestinian people. The key answer of this scale is "Yes=1" or "No= 0", and no reversal items. In this study, Siege Checklist Cronbach's alpha (No. of items = 21) was 0.72.

The Taylor Manifestation Anxiety scale (TMAS)

Taylor (1953) developed one of the first measures of chronic, manifest anxiety, Taylor's Manifest Anxiety Scale (MAS). Taylor's scale consisted of items selected from the Minnesota Multiphase Personality Inventory Taylor's MAS was reported to be useful in identifying adults with chronic anxiety (Reynolds & Richmond, 1997). We used the Arabic version with 50 items and answer is "Yes= 1" or "No= 0", And there were reversal items. The score ranged from (0- 13 no anxiety), (14- 26 Mild anxiety), (33- 40 moderate anxiety), and (37- 50 very sever anxiety). The reliability of the scale was tested by using Cronbach's alpha which was 0.79.

Beck Depression Inventory (BDI-2)

The long form of the BDI is composed of 21 questions or items, each with four possible responses. Each response is assigned a score ranging from zero to three (0, 1, 2, 3), indicating the severity of the symptom. Individual questions of the BDI-2 assess mood, pessimism, sense of failure, self-dissatisfaction, guilt, punishment, self-dislike, self-accusation,

suicidal ideas, crying, irritability, social withdrawal, body image, work difficulties, insomnia, fatigue, appetite, weight loss, bodily preoccupation, and loss of libido. Items 1 to 13 assess symptoms that are psychological in nature, while items 14 to 21 assess more physical symptoms. The scores of the BDI-2 were, (0-21 no depression), (22 - 42 moderate depression), and (43 -63 sever depression). The reliability of the scale was tested by using Cronbach's alpha which was 0.85.

Procedures

An approval letter obtained from the administrations of the universities in response from Al Quds University pre-request to facilitate our mission. An approval letter was obtained from Helsinki committee in the Ministry of Health to allow the researchers to carry out his study. Informed consent was obtained from the respondents printed on the cover page of the questionnaire clarifying the aim of the study and its objectives, and grantee that they will be protected from any harm resulting from their agreement or disagreement for participation. The data was collected on March and April 2009.

Statistical analysis

After data collection the researcher used SPSS program (Ver. 16) for data entry and analysis. In addition, the researcher used descriptive analysis including frequencies, t-independent tests, One Way ANOVA, and Pearson correlation coefficient for explaining the relation and differences between the study variables.

Socio-demographic results of the study sample

The following table, the total numbers of sample selected for the current study was 392 university students. The study showed that 183 (46.7%) of the university students of were males, and 209 (53.3%) were females, the mean of age of the study sample is (20.66 years) and standard deviation SD is (2.51) years. 201 of the university students were live in city (51.3%), 152 live in camp (38.8%) and 39 live in village (9.9%). were study in Al-Aqsa University (23.0%), 126 were in Islamic University (32.1%), 90 of Al-Azhar University were (23.0%), and 86 of sample were of Al-Quds open University (21.9%). Forty five of the university students were have family size 4 persons and less than (11.5%), 107 were 5 - 7 persons (27.3%) and 240 of the sample were have 8 and above of family size (61.2%). There were 154 of university students had family income less than 1000 NIS (39.3%), 100 family income was from 1001-2000 NIS (25.5%), 69 of sample were from 2001-3000 NIS (17.6%), 27 were from 3001-4000 NIS (6.9%), 42 were more than 4000 NIS (10.7%).

Table 1: Socio-demographic results of the study sample (N = 392)

Variable	No.	%				
Sex						
Male	183	46.7				
Female	209	53.3				
Place of residence						
North Gaza	200	51.0				
Gaza	87	22.2				
Middle area	73	18.6				
Khan Younis	15	3.8				
Rafah	17	4.3				

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Type of residence					
City	201	51.3			
Camp	152	38.8			
Village	39	9.9			
University	Y				
Al-Aqsa University	90	23.0			
Islamic University	126	32.1			
Al-Azhar University	90	23.0			
Al-Quds open University	86	21.9			
No of sibli	ngs				
4 persons and less	45	11.5			
5 - 7 persons	107	27.3			
8 and above	240	61.2			
Family monthly	income				
1000 NIS and less than	154	39.3			
1001 - 2000 NIS	100	25.5			
2001 - 3000 NIS	69	17.6			
3001- 4000 NIS	27	6.9			
More than 4000 NIS	42	10.7			

Frequency of siege among the study sample

The total scores of the siege among the study sample at the level of 54.0%, where the ratio scales plays the role of this step. Where the highest siege items were "we can not finish some construction and repair work in our house due to shortage of cement and building materials" 97.4 %, followed by "One of the family member died due to prevention of traveling for treatment" 86.2 %. I had suffering of not able to receive proper medical care 16.6 %, and I sold some of my furniture and family gold 16.1%.

Table 2: Frequency of siege items

N	N Items of siege		es	No	
IN	items of siege	N	%	N	%
1	We can not finish some construction and repair work in my house due to shortage of cement and building materials	382	97. 4	10	2.6
2	One of the family member died due to prevention of traveling for treatment		86. 2	54	13.8
3	We can not find some of the necessary things for children (Milk, baby napkins, etc.)		86. 2	54	13.8
4	I feel I am in a big prison	307	78. 3	85	21.7
5	My work affected so much due to shortage of fuel, papers, medicine, row materials	303	77. 3	89	22.7
6	Social visits are less than before	295	75. 3	97	24.7
7	I quitted some purchased daily needs	280	71. 4	112	28.6
8	I started doing the papers for immigration	263	67. 1	129	32.9
9	My work affected so much due to cut-off of electricity	257	65. 6	135	34.4
10	I was not able to reach a place I planned to go to	214	54. 6	178	45.4

11	I need to travel outside the Gaza Strip and can not	199	50.8	193	49.2
12	I went to Zaka organizations and other organizations to get the food		50.8	193	49.2
13	I can not find things I need in the market	152	38.8	240	61.2
14	I was not able to get specific medicine for me or for one of the family member		38.5	241	61.5
15	My monthly income decreased	144	36.7	248	63.3
16	Prices are sharply increased	139	35.5	253	64.5
17	I thought of immigration	130	33.2	262	66.8
18	I was prevented from visiting one of the family members in Israelis jails		31.9	267	68.1
19	I stopped completely working	98	25.0	294	75.0
20	I had suffering of not able to receive proper medical care	65	16.6	327	83.4
21	I sold some of my furniture and family gold.	63	16.1	329	83.9

Frequency of anxiety among the study sample

The total scores of anxiety among the study sample at the level of 56.4%, where the ratio scales plays the role of this step. Where the highest item were "I would like to be happy like others" 92.1 %, followed by "I lost my sleep because of anxiety" 86.7% %.While the lowest item were the "I feel no redness face at all" 22.2%, and the "I feel quietness all times" 26.3 %. There were 8 (2.0%) of the study sample of the university students were had no anxiety "0– 13 total scores", 156 (39.8%) had mild anxiety "14– 26 scores", 166 (42.3%) were had moderate anxiety "27– 36 scores", and 62 (15.8%) of the study sample were had sever anxiety "37–50 scores".

Table 3: Prevalence of anxiety among the study sample

Variable	No.	%
No anxiety "0- 13 scores"	8	2.0
Mild anxiety "14- 26 scores"	156	39.8
Moderate anxiety "27- 36 scores"	166	42.3
Severe anxiety "37- 50 scores"	62	15.8
Total	392	100

Frequency of depression among the study sample

The total scores of depression among the study sample at the level of 32.0%. Where the highest depression effects were "tiredness or fatigue" 64.5 %, followed by "Sadness" 62.8 %, and "guilty feelings" 59.2 %. While the lowest depression effects are the past failure 8.7%, and self—dislike 11.5 %.

There were 234 (59.7%) of the study sample of the university students were had no depression "0- 21 total scores", 146 (37.2%) suffered moderate depression "22- 42 scores", and 12 (3.1%) of them were had sever depression "43- 63 scores".

Table 4: Prevalence of depression among the study sample

Variable	No.	%
No depression "0- 21 scores"	234	59.7
Moderate depression "22- 42 scores"		37.2
Severe depression "43- 63 scores"	12	3.1
Total	392	100

The relation between Siege and mental health "anxiety and depression" among the study sample:

There were positive significant correlation between siege and anxiety and among the study sample of university students (Person's correlation "R"= 0.454, P= 0.001).

There were positive significant correlation between siege and depression and among the study sample of university students (Person's correlation "R"= 0.250, P= 0.001).

That means the high incidence of siege will combined with high incidence of anxiety and depression, among the study sample of university students, and reversible is right.

Siege, anxiety and depression according to type of the sex

The researcher demonstrate t-independent test to investigate the differences between male and female in demonstrating Siege and anxiety and depression. The result found that a significant difference in siege according to sex of the study sample, (t= 4.21, p= 0.001), in favor males. In addition; the result found that a significant difference in depression according to sex of the study sample, (t= 3.29, p= 0.001), in favor males. While the result found that no significant difference in anxiety according to sex of the study sample, (t= 0.56, p= 0.576).

Table 5: Independent t-test comparing means of siege and anxiety and depression according to sex

Variable	Male N = 183				N = 209		T- value	Sig. Level
	Mean	SD	Mean	SD	df= 390	Tever		
Siege	12.19	4.238	10.57	3.328	4.21	*** 0.001		
Anxiety	28.42	8.437	27.98	7.134	0.56	0.57		
Depression	21.95	11.149	18.64	8.705	3.29	*** 0.001		

Siege, Anxiety and depression according to university of the study sample:

In order to investigate the difference in siege, anxiety and depression according to university of the study sample (Aqsa, Islamic, Azhar, or Quds) the researchers demonstrate one-way ANOVA analysis. There was a significant difference in siege according to the university of the study sample (f=24.496; P= 0.001). The lowest siege effect was on the Islamic university (mean; 9.25), and the highest siege effect was on Al Quds Open (mean 13.31).

In addition; there was a significant difference in anxiety according to the university of the study sample (f=4.782; P= 0.003). The lowest anxiety effect was on Islamic university (mean 26.50), but the highest anxiety effect was on Al Quds Open university (mean 30.54). While; there was no significant difference in depression according to the university of the study sample (f=1.624; P= 0.183).

Table 6: One-way ANOVA comparing siege, anxiety and depression according to university

Variable	Source of variance	Sum of Squares	Df	Mean Square	F- value	Sig. Level
	Between Groups	928.214	3	309.405	24.496	
Siege	Within Groups	4900.674	388	12.631		*** 0.001
	Total	5828.888	391			

	Between	840.092	3	280.031			
	Groups	040.002	٦	200.031		* *	
Anxiety	Within	22722.558	200	E0 E62	4.782	0.00	
_	Groups	22/22.556	50	30.303		3	
	Total	23562.651	391				
	Between	400 161	489.161	2	163.054		
	Groups						
Depression	Within	38965.490	200	100 407	1.624	0.18	
_	Groups	30903.490	300	100.427		3	
	Total	39454.651	391				
*n < 0.05	**n~ 0	Ω1		***n	. 0. 001		

Post -hoc analysis using Scheffe statistical test was done and indicated; the means of siege and anxiety according to university of the study sample (Aqsa, Islamic, Azhar, or Quds). The group of Islamic university students were significantly lower in siege and anxiety than other groups of universities of the study sample.

Table 7: Means of siege and anxiety according to university

Variable		No.	Mean	S.D
	Aqsa	90	11.82	3.922
Siege	Islamic	126	9.25	3.646
siege	Azhar	90	11.85	2.798
	Quds Open	86	13.31	3.714
	Aqsa	90	28.35	8.288
Anxiety	Islamic	126	26.50	7.574
Allxrecy	Azhar	90	28.14	7.353
	Quds Open	86	30.54	7.375

Siege, anxiety and depression according to type of residence (City-Camp-Village):

One-Way ANOVA analysis was used to study the differences between siege, anxiety and depression according to the type of residence (City-Camp-Village).

There was a significant difference in anxiety according to the type of residence of the study sample (f=4.897; P= 0.008). In addition; there was a significant difference in depression according to the type of residence of the study sample (f=9.445; P= 0.001).

While; there was no significant difference in siege according to the type of residence of the study sample (f=1.963; P= 0.142).

Table 8: One-way ANOVA comparing siege, anxiety and depression according to type of residence

Variable	Source of variance	Sum of Squares	D£	Mean Square	F- value	Sig. Level
	Between Groups	58.246	2	29.123	1.963	
Siege	Within Groups	5770.642	389	14.835		0.142
	Total	5828.888	391			
	Between Groups	578.722	2	289.361		
Anxiety	Within Groups	22983.929	389	59.085	4.897	** 0.008
	Total	23562.651	391			

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		Total	39454.651	391			
	Depression	Groups	37627.490	389	96.729	7.115	0.001
		Within	27607 400	200	06 700	9.445	***
		Between Groups	1827.161	2	913.580		
- 1							

Post –hoc analysis using Scheffe statistical test was done and indicated; the means of anxiety and depression according to type of residence of the study sample (City-Camp-Village). The group of students who live in village were significantly higher in anxiety and depression than other groups the study sample. The lowest anxiety effect was on cities residence (mean 27.76), and the highest was on village residence (31.84). But the lowest depression effect was on camp residence (18.81) and the highest was on village residence (16.46).

Table 9: Means of anxiety and depression according to type of residence

Variable	No.	Mean	S.D	
	City	201	27.76	7.444
Anxiety	Camp	152	27.81	8.099
	Village	39	31.84	7.242
	City	201	20.01	9.560
Depression	Camp	152	18.81	9.737
	Village	39	26.46	11.502

Siege, anxiety and depression according to the family income of the sample

One-way ANOVA analysis was demonstrated to investigate the differences in siege, anxiety and depression according to family income of the study sample (1000 NIS and less than, 1001 – 2000, 2001- 3000, 3001- 4000, and more than 4000 NIS).

There was a significant difference in siege according to the family income of the study sample (f=8.476; P= 0.001). In addition; there was a significant difference in anxiety according to the family income of the study sample (f=2.562; P= 0.038).

While; there was no significant difference in anxiety according to the family income of the study sample (f=1.319; P= 0.262).

Table 10: One-way ANOVA comparing siege, anxiety and depression according to family income

	Variable	Source of variance	Sum of Squares	D£	Mean Square	F- value	Sig. Level		
	Siege	Between Groups	469.509	4	117.377		*** 0.001		
		Within Groups	5359.379	387	13.849	8.476			
		Total	5828.888	391					
	Anxiety	Between Groups	607.814	4	151.954		* 0.038		
		Within Groups	22954.836	387	59.315	2.562			
		Total	23562.651	391					
	Depression	Between Groups	530.760	4	132.690	32.690			
		Within Groups	38923.890	387	100.579	1.319	0.262		
		Total	39454.651	391					
n	< 0.05 **n< 0.01 ***n< 0.001						•		

 Post –hoc analysis using Scheffee statistical test was done and indicated; the means of siege and anxiety according to family income of the study sample (1000 NIS and less than, 1001 – 2000, 2001- 3000, 3001- 4000, and more than 4000 NIS). The students of two lowest family income group (2000 and less than) were significantly more affect by siege than two highest family income groups (3001 and above) of the study sample. The lowest siege affect was on family income that ranged between 3001-4000NIS (mean 8.85), and the highest siege effects was on low family income (less than 1000NIS). In addition; the students of lowest family income group (1000 NIS and less than) were significantly high anxious than two highest family income groups (3001 and above) of the study sample. The lowest anxiety effect was on family income that ranged between 3001-4000 NIS by mean 24.59) and the highest anxiety effects was on low family income (less than 1000 NIS).

Table 11: Means of siege and anxiety according to family income

Variable	No.	Mean	S.D	
	Less than 1000 NIS	154	12.17	3.719
Siege	1001 - 2000 NIS	100	11.85	3.691
	2001 - 3000 NIS	69	10.81	4.106
	3001- 4000 NIS	27	8.85	3.644
	More than 4000 NIS	42	9.45	3.132
	Less than 1000 NIS	154	29.20	7.779
	1001 - 2000 NIS	100	28.11	7.782
Anxiety	2001 - 3000 NIS	69	28.39	6.800
	3001- 4000 NIS	27	24.59	7.831
	More than 4000 NIS	42	26.66	8.495

Notes: 3.90 NIS= one Dollar

Discussion

The results demonstrated that the total mean of siege items among the study sample was 11.33 at the level of 54.0%. Where the highest siege effects were "I can not finish some construction and repair work in my house due to shortage of cement and building materials" 97.4 %, followed by "One of the family member died due to prevention of traveling for treatment" 86.2 %. The researchers hypothesize that related to sustainability of the siege and its expansion all over Gaza and affected all people from different socioeconomic classes. This is a consistent and systematic policy of collective punishment against Palestinian civilians in contradiction with the international conventions. That appear to be consistent with the finding of CMHP (2008) report that reported that the continuations of the closures and restrictions have had catastrophic effects on the living conditions of civilians resulting in exacerbation of the existing problems of poverty and unemployment.

In a report by Butcher (2008) found that Gaza's humanitarian crisis is more acute today than at any time. More Gazans are dependent on food aid than ever before, hospitals suffer the longest power cuts yet experienced, record levels of raw sewage are being pumped daily into the sea and the economy has never been worse.

Furthermore, the World Health Organization (WHO) (2008) in their report found that the lack of electrical power, arising from a fuel shortage, and restrictions on the movement of people and goods, including medicines, jeopardize the continuity of basic health care and curtail access to specialist care outside Gaza.

However, Palestinian Shippers' Council (2007) reported that the economic situation is also affected with closure imposed on exports and the limitation of imports to basic commodities and processed food, while needed raw materials for industry production are banned from entry.

The results revealed that 2% of the universities students have no anxiety; 39.8% have mild anxiety; 42.3% have moderate anxiety; and15.8% have severe anxiety. The researcher hypothesize that for the effects of the siege that affected every one in Gaza strip and the majority of the students suffer from the anxiety by all levels. Furthermore, the stressful situation which they live have major affect on those student and also, the students were exposed to different situational stressors that accumulated the anxiety disorders among them. Since they exposed to war crisis, siege with all its dimensions that reflected on their daily living functions. In a study by Abu Hein (2008) who studies the effects of living under siege found that 92% of the Palestinian children of Gaza suffer from feeling of insecurity and feel anxiety and tension that appear consistent with our results.

Also, consistent with the results of CMHP (2008) which reported that the reactions for frustrations and pressure contribute to low self esteem, feeling of worthlessness, powerlessness, loneliness, despair, loss of hope, anxiety and feelings of anger and alienation, panic, fear, nervousness, depressed mood, and feeling overwhelmed, feelings of laziness and apathy, helplessness, and inability to practice the daily routine in an appropriate manner as well as an increased demands and pressures and inability to fulfill such demands in an adaptive manner.

But the results demonstrated that 59.7% of the students have no depression; 37.2% have moderate depression; and 3.1% have severe depression. The researcher hypothesize that related to the siege effects and the restrictions of movements, unavailability of the necessary needs on both social or economical aspects. These results seem to be consistent with the results of CMHP report (2008) which reported that in the case of prolonged psychological pressure and frustrations, and inability to cope with them, the symptoms may develop into more serious psychological disorders such as depressions, anxiety, or somatoform disorders (conversion disorders and hypochondriasis).

Anxiety and depression prevalence have been more prevalent among the universities students in Gaza Strip. These results indicated the critical issue especially when the results appeared among the universities students since these students considered elite among the Palestinian people.

These results seem to be consistent with the results of First (2008) who found that listening to children is difficult for parents under siege because of parental shame at not being able to provide and protect, and confusion over what can be said. Parental anxiety, grief, helplessness, depression or despair may enter in.

The increasing numbers of anxiety and depression cases among universities students related to different situations originated from the siege and as a dangerous consequence of the siege. The deficiency of food supplies; health equipment; educational process; and economical aspects due to siege made different problems to Gazan's population generally and universities students especially. In a study by O'Loughlin (2008) found that nearly 60% suffered post traumatic stress disorder, around 20% suffered anxiety and 51% were depressed.

However, in a study by Abu Hien (2008) He found that 87%of Gaza children feel fear of darkness and they are more clinging to there parents and sharing them there bids. 68%of them suffering from school problems like lack of concentration . 76% of them has behavioral problems like isolation , social withdrawal and aggression.

But in another study by Awad (2008) found that feelings of insecurity and distress are all too common for children who witness violence. Often, they perform poorly in school, or drop out altogether.

The results revealed that there were significant positive correlation between siege , anxiety, and depression among universities students. However, that means the high incidence of the siege combined with high incidence of anxiety and depression. The researcher attribute that for the different effects of the siege on all life walks. The siege destroyed the humanity, the economy, social relation, and education.

In a study by Nassrallah (2008) and CMHP report (2008) showed that the siege had a negative effects on the population in Gaza strip that appear consistent with our results.

According to CMHP report (2008) they found that there were other psychological responses including lack of attention, poor concentration, and memory problems, all of which result in lack of decision making and being easily-provoked. For people who are already suffering from psychological problems, their problems are aggravated as a result of the increased pressure and due to lack of medications, particularly for psychotic patients. At the somatic level, there are physical reactions such as pains in some parts of the body including; muscle pains, headaches, stomachaches, and feeling of suffocation and exhaustion etc (CMHP, 2008).

In another study by CMHP (2007) found that children may develop various psychological problems including; anxiety and depression, aggressiveness, poor concentration, withdrawal, clinging to parents, sleep disturbances. Also, children regress to behaviors inappropriate to their stage of development through thumb sucking, nail-biting, enuresis, and aggressiveness.

The results revealed that there were a significant differences in siege and depression according to sex in favor of males; while there were no significance in anxiety according to sex of the study sample. The researcher attribute these results for male dominance in the community and because of the direct participation of males in all life walks and they more prone to stressful situations than female. Males in Gaza face different stressful situations since they participate in work, help their families, their needs expand and they unable to meet the initials of it. These unmet needs lead to depressed mood and other psychological problems that appear more in males. But anxiety seems to be equal in both sexes so any thing in the life due to the deficiency of the necessary needs may lead to anxious mood in both.

However, in a study by CMHP (2007) found that the closure is converting the Gaza strip into what resembles a huge prison, resulting in feelings of intolerance, isolation, alienation, broken social connections, and networks as well as an increased level of community, tribal, and familial violence.

The results revealed that there were a significant difference in siege and anxiety according to the type (name) of the university. Scheffe test indicated that Islamic university students

were significantly lower in siege and anxiety than other universities. The researcher hypothesize that these results reflect the policy of the university and institutional mission for every university. However, these results indicated that the availability of the Islamic university resources diminish the effects of the siege and anxiety, but the other universities affected by the siege and this lead to anxiety because they followed by external resources and polices. Also, the Islamic university governed by local and national policy that differ from other universities. But the other universities exposed to different situational stressors including external or internal stressors that not complied with the procedures of the Islamic university.

The results found that there were a significant differences in anxiety and depression according to type of residence in favor of villages residence. The researcher hypothesize that because the shortage of necessary needs and life requirements for the students who live in villages. The highly demanding life required more needs but the villages residents unable to met these needs during the current crisis. So, the villages resident students more prone to develop anxiety and depression than others.

The results showed that there were no significant differences in siege, anxiety, and depression according to the family size between the study sample. The researcher attribute that for unexpected effects that cover all families without regarding to the number of the family and it is considered general problem not specified for some persons.

The results revealed that there were a significant differences in siege and depression according to father and mother education in favor of not educated (parents). The researcher hypothesized that related to social differences and limited resources in addition to additional thoughts and opinions related to siege and depression.

The results found a significant differences in siege and anxiety according to father work among the study sample. Scheffe test indicated that the universities students who have unemployed fathers have higher degrees of siege and anxiety than others who employed. The researcher attribute these results for accumulated effects of the siege that people suffer from and all life walks lead to increase these problems among unemployed. However, all Gazan's people suffer from different effects of siege and anxiety with variety in its sequence and duration. That seem to be consistent with Palestinian Shippers' Council Report (2007) which reported that unemployment (65%) levels have sharply limited households' ability to buy supplies.

But the results revealed that there were no statistical differences in siege, anxiety, depression according to mother's employments for the universities students. The researcher hypothesize that because mothers didn't play role in work and employment in our community .

The results found that there were a significant difference in siege and anxiety according to family income among the universities students. Scheffe test indicated that universities students with low family income more affected by siege and anxiety than universities students with high family income. The researcher hypothesize that these results because high income families achieve the needs of their students but low income families unable to achieve the basic needs and requirements so they affected by siege and anxiety.

The current study seem to be consistent with the results of Palestinian Shippers' Council Report (2007) which reported that Gaza's high poverty (85% of households are living under the poverty line) and unemployment (65%) levels have sharply limited households' ability to buy supplies. These factors amongst other impediments have affected and impacted the operation and growth of the private sector enterprises. Most of the 3,900 industries in Gaza are manufacturing industries of which there is a 95% dependency on imported raw materials. Also there is an 80% dependency on the imports of machinery and maintenance parts which can lead to the suspension of production lines.

However, As a result, direct and indirect losses are estimated at US\$ 4 million for the Furniture Sector, US\$ 12 millions for the Garment and Textile Sector and US\$ 3 millions for the Processed Food Sector. The summer season is critical for the exports of industrial sectors. The planting season normally starts in June for the upcoming export season in November. If the border terminals remain closed, the sector will face a 100% loss in sales estimated to be more than US\$ 12 million (Palestinian Shippers' Council ,2007).

Conclusion

The siege have several dangerous effects on social, political, economical, educational, as well as psychological impacts. The siege limit the entrance of medical equipments and instruments, drugs and medication, goods, and all life basics. Furthermore. the limited resources in Gaza strip due to siege created socioeconomical gap in all life walks. The Palestinian people suffer from poverty, low income, and high prices for every thing they want to achieve. The dramatically changes that occurred due to siege were severe and unbearable in short time which deteriorated all aspects of life inside Gaza Strip. Also, the universities students were considered the most significant group among Palestinian people who complain of several limitations and shortages due to siege that affected these groups. These groups represent the highest cluster among Palestinian people whom suffer of a great anxiety and depression and other mental health problems as a result of confirmed siege on Gaza Strip. On the other hand, Gazan's people generally complained from unavailability of medical help and supplies that must be available for every one in our community. In addition, the Gazan's people developed various medical and ,mental health problems due to siege. However, they complaining of many psychological problems ranging from anxiety, depression, and other psychological problems including anger, sleep disturbance, aggression. While, the educational process were deteriorated and all the students were unable to achieve their right to learn board or in West Bank. The prolonged prohibition on students leaving the Strip to study has created a grave shortage of skilled personnel, among them specialist physicians and persons engaged in the paramedic professions. Generally, The siege and its accompanying sanctions have led to shortages of food, electricity, medicines and medical treatment, have severely restricted freedom of movement, and have impeded the residents' ability to earn a living and obtain an education.

Recommendations

Community Mental Health Providers:

• It is necessary from community mental health program to take action and provide the main intervention for those complaining from anxiety and other psychological problems.

- It is necessary to provide immediate action regarding psychological problems and mental health problems for those suffering from siege.
- Providing psychological first aid for those complaining from anxiety and depression due to siege and provide them with the necessary requirements.

International Organizations:

- Asking international humanitarian organizations to take action against the siege and follow the international census to relieve the siege.
- Free the main entrance (check points) from and to Gaza, and re-open main borders.
- It is necessary for the international community to pay a close attention to the children right of protection from the negative consequences of siege in order to maintain their psychological and physical well being.
- It is necessary to urge the international community to protect Palestinian children and to break the imposed siege on Palestinian people.
- It is necessary from the international community to pressure Israel to stop violation of Palestinian rights and to allowing free movement of people, goods, and necessary equipment and supplies.
- It is necessary from the international court of justice to pressure Israel to abide by the international conventions regarding human rights and children's rights.

Universities and Colleges

- It is necessary for the universities to train and instruct the students regarding the psychological problems and the effects of the siege and to provide necessary intervention regarding the effects of the siege.
- Provide close attention to the surrounding situations and respect the human right and make a real consideration to university fees and students requests.

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