

Questionnaire analysis

8	7	6	5	4	3	2	1	Question
						Female/ أنثى	Male/ذكر	Child's gender/جنس الطفل
					Refugee camp/مخيم اللاجئين	Displace d within Lebano n/نازح داخل لبنان	Original home/الم سكن الأصلي	Child's current residence/مكان إقامة الطفل الحالي
Bekaa/ البقاع	Nabatieh/ل لنبطية	North Lebanon شمال/ لبنان	South Lebanon/ جنوب لبنان	Beirut/بيروت	Baalbeck- Hermel/ بعلبك- الهرمل	Akkar/ع كار	Mount Lebanon/ جبل لبنان	In which district do u live?/في أي قضاء تقيم
				Other/غير ذلك	Part- time/موظف بدوام جزئي	Unempl oyed/لا يعمل	Employed /موظف	Parent/guardian's occupation status before the war/حالة الوالد/الوصي الوظيفية قبل الحرب
						No/كلا	Yes/نعم	Did your family experience displacement due to the war?/هل تعرضت عائلتك للنزوح بسبب الحرب
		Yet displaced ما زلنا/ نازحين	أكثر/5+ من خمسة أشهر	4	3	2	1 or less/أو أقل	If yes, how long was the child displaced till now by month?/إذا كانت الإجابة نعم، كم كانت مدة نزوح الطفل حتى الآن بالأشهر
				Other/غير ذلك	Part- time/موظف بدوام جزئي	Unempl oyed/لا يعمل	Employed /موظف	Parent/guardian's current employment status/حالة الوالد/الوصي الوظيفية الحالية
						No/كلا	Yes/نعم	Did your child experience (heard, saw) bombings or explosions in the residence village/city?/هل تعرض طفلك (سمع أو رأى) تفجيرات أو انفجارات في القرية/المدينة التي يقيم فيها
						No/كلا	Yes/نعم	Did your child lose a family member due to the war?/هل فقد طفلك أحد أفراد العائلة بسبب الحرب
						No/كلا	Yes/نعم	Was your house destroyed due to war?/هل تم تدمير منزلك بسبب الحرب
						No/كلا	Yes/نعم	Did your child get separated from parent/guardian? (for any reason other than death)/هل انفصل طفلك عن الوالد/الوصي؟ (لأي سبب آخر غير الوفاة)
						No/كلا	Yes/نعم	Did your child face food/water shortages due to the war?/هل واجه طفلك نقصاً في الطعام/الماء بسبب الحرب
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	Before the war, how often did your child have difficulty in

								قبل الحرب، كم مرة كان طفلك يعاني من صعوبة في النوم sleeping?/ طفلك يعاني من صعوبة في النوم
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	After the war, how often did your child experienced hypervigilance (being alerted to the environment)?/ بعد الحرب، كم مرة عانى طفلك من فرط اليقظة (الانتباه المفرط للمحيط)
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	Before the war, how often did your child suffer from nightmares?/ قبل الحرب، كم مرة عانى طفلك من الكوابيس
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	After the war, how often did your child suffer from nightmares related to the war?/ بعد الحرب، كم مرة عانى طفلك من كوابيس مرتبطة بالحرب
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	Before the war, how often did your child experience worry/fear?/ قبل الحرب، كم مرة عانى طفلك من القلق/الخوف
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	After the war, how often did your child experience worry/fear?/ بعد الحرب، كم مرة عانى طفلك من القلق/الخوف
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	Before the war, how often did your child show aggressive behavior?/ قبل الحرب، كم مرة أظهر طفلك سلوكاً عدوانياً
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	After the war, how often did your child show aggressive behavior?/ بعد الحرب، كم مرة أظهر طفلك سلوكاً عدوانياً
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	Before the war, how often did your child suffer from withdrawal from family/friends?/ قبل الحرب، كم مرة كان طفلك يعاني من الانسحاب من العائلة/الأصدقاء
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	After the war, how often did your child suffer from withdrawal from family/friends?/ بعد الحرب، كم مرة عانى طفلك من الانسحاب من العائلة/الأصدقاء
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	Before the war, how often did your child experience mood swings?/ قبل الحرب، كم مرة عانى طفلك من تقلبات مزاجية
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	After the war, how often did your child experience mood swings?/ بعد الحرب، كم مرة عانى طفلك من تقلبات مزاجية
			Always دائماً	Often/غالباً	Sometimes/أحياناً	Rarely/نادراً	Never/أبداً	After the war, how often did your child avoid war related

								بعد الحرب، كم مرة تجنب / topics? طفلك الموضوعات المتعلقة بالحرب؟
			Religious practices/الممارسات الدينية	Avoidance of triggers/تجنب المحفزات	Drawing/Writing/الرسم/الكتابة	Playing games/sports/ممارسة الألعاب/الرياضات	Talking to family/friends/التواصل مع العائلة/الأصدقاء	What strategies does your child use the most to cope with stress? (select all that apply)/ما هي الاستراتيجيات التي يستخدمها طفلك بشكل أكبر للتعامل مع التوتر؟ (اختر جميع ما ينطبق)
						No/كلا	Yes/نعم	Has your child received psychological support (mental health first aid, clinical therapy, counseling services, other) since the war? هل تلقى طفلك دعمًا نفسيًا / إسعافات أولية للصحة النفسية، علاج سريري، خدمات إرشادية، أو غيرها منذ بدء الحرب؟
			Not effective/غير فعال	Somewhat ineffective/غير فعال إلى حد ما	Neutral/محايد	Somewhat effective/فعال إلى حد ما	Very effective/فعال جدًا	If yes, how effective was the support? إذا كانت الإجابة نعم، فما مدى فعالية الدعم
				No, the child didn't attend school/لا، لم يحضر الطفل المدرسة	Yes, both in person and online/نعم، كلاهما، شخصيًا وأونلاين	Yes, online/نعم، أونلاين	Yes, in person/نعم، شخصيًا	Did your child attend school during the war? هل حضر طفلك المدرسة خلال الحرب
					No, the child is not attending school/لا، الطفل لا يحضر المدرسة	Yes, at a different school/نعم، في مدرسة مختلفة	Yes, at the same school as before/نعم، في نفس المدرسة كما كان من قبل الحرب	Is your child currently attending school? هل يحضر طفلك المدرسة حاليًا
			Declined significantly/انخفض بشكل كبير	Declined slightly/انخفض بشكل طفيف	No change/لم يحدث تغيير	Improved slightly/تحسن بشكل طفيف	Improved significantly/تحسن بشكل كبير	Compared to before the war, how has your child's academic performance changed after the war? مقارنة لما قبل الحرب، كيف تغير أداء طفلك الأكاديمي بعد الحرب
					Rarely/Nevery/نادرًا/أبداً	Occasionally/بين الحين والآخر	Yes, regularly/نعم، بانتظام	Does your child participate in social activities in/out school? هل يشارك طفلك في الأنشطة الاجتماعية داخل المدرسة أو خارجها
					Maybe/ربما	No/كلا	Yes/نعم	Is your child currently in need of psychological support? هل يحتاج طفلك حاليًا إلى دعم نفسي

					Maybe/ربما	No/كلا	Yes/نعم	Is your child currently in need of educational materials (Books, school supplies ...)?/هل يحتاج طفلك حاليًا إلى مواد تعليمية (كتب، مستلزمات مدرسية...)
					Maybe/ربما	No/كلا	Yes/نعم	Is your child currently in need of safe housing?/هل يحتاج طفلك حاليًا إلى سكن آمن
					Maybe/ربما	No/كلا	Yes/نعم	Is your child currently in need of medical care?/هل يحتاج طفلك حاليًا إلى رعاية طبية
					Maybe/ربما	No/كلا	Yes/نعم	Is your child currently in need of food/water?/هل يحتاج طفلك حاليًا إلى طعام/ماء

Preprocessing

Null values

District: one null value => was removed.

Displacement period in months: null values because the question is optional => replaced by 0 to indicate 0 months of displacement.

Effectiveness of mental health support: null values because the question is optional => replaced by 0 to identify individuals who didn't receive support.

Outliers

No outliers to be dealt with, as the questions were put in a way to limit them.

SPSS Analysis

Independent Sample T-test

Preparation

Index_before: a continuous variable that measures the mean of sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings before the war.

Index_after: a continuous variable that measures the mean of sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings after the war.

Testing results

1. Index_before and displacement

Null hypothesis: There is no relationship between the index_before and the displacement state.

Alternative hypothesis: There is a relationship between index_before and the displacement state.

Q1. Did your family experience displacement due to the war?		N	Mean	Classification	Std. Deviation	Significance
Index_before	Yes	57	1.8655	Rarely	.58878	0.007*
	No	77	1.6104	Rarely	.48260	

The significance is $0.476 > 0.05$, then the significance(2-tailed) 0.007 to be considered.

The p-value = $0.007 < 0.05 \Rightarrow$ Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between index_before that represents sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings before the war and the displacement state.

2. Index_after and displacement

Null hypothesis: There is no relationship between the index_after and the displacement state.

Alternative hypothesis: There is a relationship between index_after and the displacement state.

Q1. Did your family experience displacement due to the war?		N	Mean	Classification	Std. Deviation	Significance
Index_after	Yes	57	2.5058	Sometimes	.83450	0.005*
	No	77	2.0996	Rarely	.79069	

The significance is $0.494 > 0.05$, then the significance(2-tailed) 0.005 to be considered.

The p-value = $0.005 < 0.05 \Rightarrow$ Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between index_after that represents sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings after the war and the displacement state.

3. Index_before and hearing/seeing bombing

Null hypothesis: There is no relationship between the index_before and hearing/seeing bombing in the same city.

Alternative hypothesis: There is a relationship between index_before and hearing/seeing bombing in the same city.

Q4. Did your child experience (heard, saw) bombings or explosions in the residence village/city?		N	Mean	Classification	Std. Deviation	Significance
Index_before	Yes	81	1.7613	Rarely	.50891	0.265*
	No	53	1.6541	Rarely	.59093	

The significance is $0.736 > 0.05$, then the significance(2-tailed) 0.265 to be considered.

The p-value = $0.265 > 0.05 \Rightarrow$ Null hypothesis is accepted.

Result: **There is no relationship** between index_before that represents sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings before the war and hearing/seeing bombing in the same city.

4. Index_after and hearing/seeing bombing

Null hypothesis: There is no relationship between the index_after and hearing/seeing bombing in the same city.

Alternative hypothesis: There is a relationship between index_after and hearing/seeing bombing in the same city.

Q4. Did your child experience (heard, saw) bombings or explosions in the residence village/city?		N	Mean	Classification	Std. Deviation	Significance
Index_after	Yes	81	2.4959	Rarely	.82663	<0.001*
	No	53	1.9308	Rarely	.72090	

The significance is $0.043 < 0.05$, then the significance(2-tailed) <0.001 to be considered.

The p-value = $(<0.001) < 0.05 \Rightarrow$ Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between index_after that represents sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings after the war and hearing/seeing bombing in the same city.

One way ANOVA

Testing results

1. Index_after and period of displacement

Null hypothesis: There is no relationship between the index_after and the displacement period.

Alternative hypothesis: There is a relationship between index_after and the displacement period.

Index_after	N	Mean	Std. Deviation	Minimum	Maximum	Significance
0	81	2.0864	.77420	1.00	4.00	0.044*
1 or less	6	2.2222	.94084	1.33	3.67	
2	18	2.4907	.75726	1.00	3.50	
3	11	2.6818	.86427	1.50	4.33	
4	8	2.8333	1.08379	1.33	4.33	
5+	7	2.5952	.65868	1.33	3.33	
Yet displaced	3	2.3333	1.16667	1.50	3.67	
Total	134	2.2724	.83134	1.00	4.33	

The p-value = 0.044 < 0.05 => Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between index_after that represents sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings after the war and the displacement period.

2. Index_after and child current residence

Null hypothesis: There is no relationship between the index_after and the child current residence.

Alternative hypothesis: There is a relationship between index_after and the child current residence.

Index_after	N	Mean	Std. Deviation	Minimum	Maximum	Significance
Original home	115	2.1913	.82133	1.00	4.33	0.008*

Displaced within Lebanon	17	2.6765	.72522	1.33	4.17
Refugee camp	2	3.5000	.23570	3.33	3.67
Total	134	2.2724	.83134	1.00	4.33

The p-value = 0.008 < 0.05 => Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between index_after that represents sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings after the war and the child current residence.

3. Index_after and avoiding war related topics

Null hypothesis: There is no relationship between the index_after and avoiding war related topics.

Alternative hypothesis: There is a relationship between index_after and avoiding war related topics.

Index_after	N	Mean	Std. Deviation	Minimum	Maximum	Significance
Never	49	1.7517	.71047	1.00	4.33	<0.001*
Rarely	30	2.1056	.57981	1.33	3.33	
Sometimes	26	2.7756	.69112	1.50	4.33	
Often	24	2.9722	.64394	1.50	4.17	
Always	5	2.4000	.99023	1.17	3.50	
Total	134	2.2724	.83134	1.00	4.33	

The p-value = (<0.001) < 0.05 => Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between index_after that represents sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings after the war and avoiding war related topics.

4. Index_after and school attendance in war

Null hypothesis: There is no relationship between the index_after and school attendance in war.

Alternative hypothesis: There is a relationship between index_after and school attendance in war.

Index_after	N	Mean	Std. Deviation	Minimum	Maximum	Significance
Yes, in person	52	1.8750	.76332	1.00	4.00	<0.001*
Yes, online	41	2.4593	.73199	1.33	4.33	
Yes, both in person and online	14	2.5595	.82588	1.67	4.33	
No, the child didn't attend school	27	2.6049	.83480	1.00	4.17	
Total	134	2.2724	.83134	1.00	4.33	

The p-value = (<0.001) $< 0.05 \Rightarrow$ Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between index_after that represents sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings after the war and school attendance in war.

5. Index_after and school attendance after war

Null hypothesis: There is no relationship between the index_after and school attendance after war.

Alternative hypothesis: There is a relationship between index_after and school attendance after war.

Index_after	N	Mean	Std. Deviation	Minimum	Maximum	Significance
Yes, at the same school as before	117	2.2365	.85216	1.00	4.33	0.191*
Yes, at a different school	17	2.5196	.63706	1.33	3.67	
Total	134	2.2724	.83134	1.00	4.33	

The p-value = $0.191 > 0.05 \Rightarrow$ Null hypothesis is accepted and alternative is rejected.

Result: **There is no relationship** between index_after that represents sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings after the war and school attendance after war.

Chi Square

Testing results

1. Displacement period and receiving mental health support

Null hypothesis: There is no relationship between the displacement period and receiving mental health support.

Alternate hypothesis: There is a relationship between the displacement period and receiving mental health support.

		Q2. If yes, how long was the child displaced till now by month?								Total
			0	1 or less	2	3	4	5+	Yet displaced	
Q2. Has your child received psychological support (mental health first aid, clinical therapy, counseling services, other) since the war?	Yes	Count	5	2	2	4	2	1	1	17
		% of Total	3.7%	1.5%	1.5%	3.0%	1.5%	0.7%	0.7%	12.7%
	No	Count	76	4	16	7	6	6	2	117
		% of Total	56.7%	3.0%	11.9%	5.2%	4.5%	4.5%	1.5%	87.3%
Total		Count	81	6	18	11	8	7	3	134
		% of Total	60.4%	4.5%	13.4%	8.2%	6.0%	5.2%	2.2%	100.0%
		Pearson ci-square	13.285							
		Significance	0.039*							

The p-value = 0.039 < 0.05 => Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between the displacement period and receiving mental health support.

2. Parent employment before the war and receiving mental health support

Null hypothesis: There is no relationship between the parent employment before the war and receiving mental health support.

Alternate hypothesis: There is a relationship between the parent employment before the war and receiving mental health support.

			Q5. Parent/guardian's occupation status before the war				
			Employed	Unemployed	Part-time	Other	Total
Q2. Has your child received psychological support (mental health first aid, clinical therapy, counseling services, other) since the war?	Yes	Count	15	1	0	1	17
		% of Total	11.2%	0.7%	0.0%	0.7%	12.7%
	No	Count	71	7	7	32	117
		% of Total	53.0%	5.2%	5.2%	23.9%	87.3%
Total	Count		86	8	7	33	134
	% of Total		64.2%	6.0%	5.2%	24.6%	100.0%
		Pearson chi square	5.551				
		Significance	0.136*				

The p-value = 0.136 > 0.05 => Null hypothesis is accepted and alternative is rejected.

Result: **There is no relationship** between the parent employments before the war and receiving mental health support.

3. Losing a family member and receiving mental health support

Null hypothesis: There is no relationship between losing a family member and receiving mental health support.

Alternate hypothesis: There is a relationship between losing a family member and receiving mental health support.

			Q5. Did your child lose a family member due to the war?		
			Yes	No	Total
Q2. Has your child received psychological support (mental health first aid, clinical therapy, counseling services, other) since the war?	Yes	Count	7	10	17
		% of Total	5.2%	7.5%	12.7%
	No	Count	15	102	117
		% of Total	12.8%	87.2%	100.0%

services, other) since the war?	% of Total	11.2%	76.1%	87.3%
Total	Count	22	112	134
	% of Total	16.4%	83.6%	100.0%
	Pearson chi-square	8.697		
	Significance	0.003*		

The p-value = 0.003 < 0.05 => Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between the losing a family member due to the war and receiving mental health support.

4. House destruction and receiving mental health support

Null hypothesis: There is no relationship between house destruction and receiving mental health support.

Alternate hypothesis: There is a relationship between house destruction and receiving mental health support.

		Q6. Was your house destroyed due to war?		
		Yes	No	Total
Q2. Has your child received psychological support (mental health first aid, clinical therapy, counseling services, other) since the war?	Yes			
	Count	6	11	17
	% of Total	4.5%	8.2%	12.7%
	No			
	Count	14	103	117
	% of Total	10.4%	76.9%	87.3%
Total	Count	20	114	134
	% of Total	14.9%	85.1%	100.0%
	Pearson chi-square	6.362		
	Significance	0.012*		

The p-value = 0.012 < 0.05 => Null hypothesis is rejected and alternative is accepted.

Result: **There is a relationship** between the house destruction and receiving mental health support.

Paired sample t-test

Testing results

1. Index_before and index_after

Null hypothesis: There is no relationship between index before and after war.

Alternate hypothesis: There is a relationship between the index before and after war.

Paired Samples Statistics

		Mean	N	Std. Deviation	Significance
Pair 1	Index_before	1.7189	134	.54321	<0.001*
	Index_after	2.2724	134	.83134	

p-value = (<0.001) < 0.05 => Null hypothesis is rejected and alternative is accepted

Result: **There is a relationship** between sleeping disorders, nightmares, fear, aggressive behavior, social withdrawal, and mood swings before and after the war.

Coping activities

Here is a table that shows the different coping activities that helped the children to cope with the war.

Coping_activities frequencies		Responses		Percent of Cases
		N	Percent	
Coping_activities ^a	Q1. Coping_family_and_friends	94	39.5%	70.1%
	Q1. Coping_playing_games/sports	67	28.2%	50.0%

Q1. Coping_drawing/writing/reading	46	19.3%	34.3%
Q1. Coping_religious_practices	19	8.0%	14.2%
Q1. Coping_avoidance_of_triggers	12	5.0%	9.0%
Total	238	100.0%	177.6%

As revealed by the table, the most coping activity used was communicating with family and friends with around 40% of the children used this way, followed by playing games and sports. Further analysis to be done in order to observe the effectiveness of such coping mechanisms and how they can help children overcome crisis.