

Qualify of Life in the Occupied Palestinian Territory: A Comparison between the Field Trials of the World Health Organization's WHOQOL-Bref in 23 countries and the Occupied Palestinian Territory.

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INTRODUCTION

The impact of the long standing Palestine-Israeli conflict and its recent intensification has posed serious challenges to researchers, policymakers and planners. Other than fatality and morbidity rates, access to health and other services, and the birth of babies at Israeli army checkpoints, adequate tools for the assessment of the health outcomes of chronic and intensified exposure to violence, and the quality of life and well being of the population living in the Occupied Palestinian Territory (OPT), have been lacking. This lack prompted the Institute of Community and Public Health and the World Health Organization - West Bank and Gaza, in cooperation with the Palestinian Central Bureau of Statistics, to complete this pilot Quality of Life (QoL) study in the West Bank and Gaza Strip. Life quality was identified as a construct that complements objective descriptions of health outcomes of excessive exposure to violence. This is so as evidence indicates that QoL measures are increasingly being used to assess health and health related outcomes worldwide ^{1,2}. In the context of the OPT, these measures also offer the opportunity for a deeper understanding of the impact of protracted conflict on population's health, i.e., the social suffering of war.

Translation, adaptation and testing, for the purpose of validation, of a worldwide used QoL instrument (the WHOQoL-Bref), were completed in 2005. The aim was to elucidate the concept of QOL and its relevance in the local setting, and ensure the conceptual and semantic equivalence of the translated version to the basic concepts embedded in the WHO definition of QoL. This adaptation process led to the addition of a set of context-relevant items to the international instrument, without affecting its consistency and face validity. The aim was to test the appropriateness of these items in detecting the particularities of Palestinian society.

This report summarizes the findings of the empirical Palestinian QOL study, which utilized the developed Palestinian Quality of life instrument (PqoL) as its tool (see Appendix A). The report also compares the OPT QOL results with those of the WHO's international field trials (Pilot) which took place in 24 centers and 23 countries in both the developed and developing world³. The WHO Pilot contained well participants drawn from the general population and sick participants drawn from health services centers. The WHO Pilot predicted, and demonstrated, that sick participants would report poorer QOL than well participants. The OPT field trial contained participants from the general population only.

METHODOLOGY

Palestinian Quality of Life instrument

The PQoL instrument was initially based on the universally-intended WHOQoL-Bref instrument. The WHOQoL-Bref is a shortened version of the WHOQoL-100 QoL assessment tool. ⁴ The latter was proposed and developed by the WHO in an attempt to contribute to the development of a life quality tool that contributes to the assessment of health and health-related outcomes in ways that go beyond the traditional health indicators of mortality and morbidity. ^{5,6} Measures of quality of life are intended to go beyond objective descriptions of non-fatal health outcomes and include the subjective affective and cognitive appraisal by the individual of his / her health state. The WHOQoL-Bref assesses individual life quality using a set of four domains: physical, psychological, social, and environmental. Twenty-four domain-specific items are extracted, one from each of the 24 facets contained in the WHOQoL-100, and included in the shorter version. In addition, two items belonging to the Overall Quality of Life and General Health facet present in the WHOQoL-100 are included.

The PQoL instrument included all the WHOQoL-Bref items, additional items thought to be important in defining QoL in the local setting, as well a range of possible QoL determinants. Those were identified through a series of focus group discussions conducted with individuals belonging to various demographic and socio-economic characteristics, living in the Ramallah District of the West Bank and the Gaza district of the Gaza Strip.

The PQoL instrument was designed to include seven sections. Section one collects information on respondent demographic and socioeconomic characteristics including: age; sex; locale; refugee status; insurance coverage; educational, marital, economic and professional status; whether the individual lives close to an Israeli settlement or the Separation Wall, and whether those have a negative impact on her/his livelihood; whether the individual needs to cross Israeli army checkpoints in order to get to school, work or services; as well as a general self-reported health status question. Section two included the exact original WHOQoL-Bref instrument, translated into the Arabic language taking into consideration local idiomatic expressions that ensured conceptual equivalence to the original WHOQoL-Bref items. However, question 21 in the standard WHOQoL-Bref instrument (asking about satisfaction with one's sex life) was excluded due to cultural considerations that precluded the possibility of asking respondents to report on what in the local culture is usually considered a very private aspect of life.

Section three included a set of context-specific and complementary indicators identified in the focus group discussions as important aspects to include in any QoL assessment in the Palestinian context. Section four included the WHO-5 Well-Being questions. These five questions aim to assess the respondent's well-being using a positive perspective. Section five included a set of questions intended to assess the level of distress that respondents endure in daily life, thought of as important determinants of QoL. Section six included questions that can possibly form an emotive component of life quality. Finally, section seven contained a set of potential intermediate and ultimate determinants of QoL. Appendix A includes the PQoL instrument used in the present assessment.

Sampling and fieldwork

A three-stage cluster random sampling procedure was used to select a sample of 1008 adult respondents (18 years old and above) from all governorates and localities in the OPT (West Bank and Gaza Strip). The fieldwork began in December of 2005 after satisfactory field worker training in administering the questionnaire. It was completed by the Palestinian Central Bureau of Statistics, and ended one month prior to the Palestinian Legislative Council elections of January 25th 2006.

Analysis

Descriptive uni- and bivariate analyses were first conducted to understand item distributions and inter-groups variations. Four domain-specific scores were estimated based on answers to the WHOQoL-Bref 25 questions, and following the recommendations advanced by the WHOQoL team.⁷ Each time, appropriate statistical testing was used to assess differences in distribution. Chi-2 was used to assess differences in distributions between the OPT the international Pilot study results. Intra-group variations among different socio-demographic and economic categories within Palestinian society, was assessed using either a difference in means test or the analysis of variance (ANOVA). In addition, using some of the proposed PQoL items, three independent scales were constructed to reflect the distress that respondents experienced in their everyday life, their fear of uncertainty, and their perceived freedom of expression. The internal reliability of the scales were assessed by estimating the Cronbach's Alpha for each (Appendix B). Finally, and in order to simultaneously adjust for all potential confounders, multivariate analysis was performed to identify the determinants of the different QoL domain scores. All analysis was conducted using SPSS release 13 for Windows.

RESULTS:

Sample

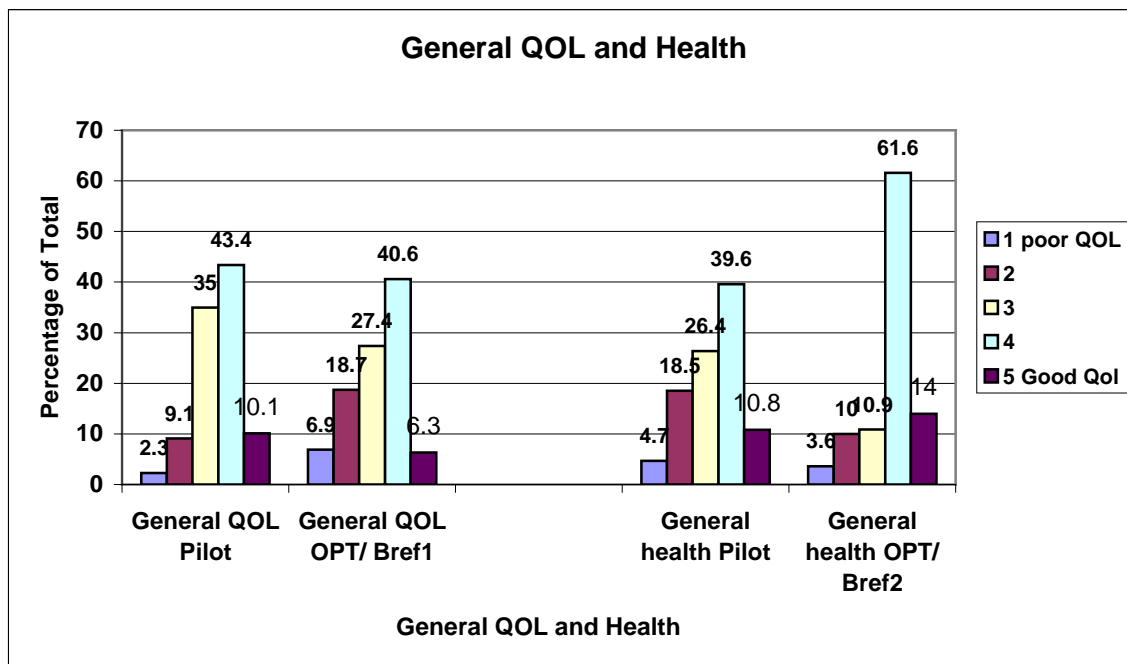
A total of 1008 adults (18 years old and above) participated in the study, representing the adult population residing in the West Bank and Gaza Strip. Males and females were almost equally represented by virtue of study design (508 males versus 500 females). The ages of respondents ranged between 18 and 86 years, with a mean age of 35.85 years and a median of 32 years. More than half of the respondents (56.5%) resided in urban localities, 27.1% in rural areas and 16.4% in Palestinian refugee camps. The sample did not target sick people, and was drawn from the general population. This contrasts to the WHO Pilot sample with included 53% well respondents and 47% sick respondents drawn from health services centers.

WHO Pilot and OPT Comparisons

General health

Chart 1 delineates the distribution of Pilot and OPT responses to the two global questions on life quality assessment, and satisfaction with one's health status (Bref 01 and 02). The Chart demonstrates that the OPT population reported significantly worse QoL than the Pilot population, with 2.3% of the Pilot reporting very poor QoL compared to 6.9% for the OPT, 9.1% poor for the pilot compared to 18.7% for the OPT ($p < 0.01$). As expected, the general picture reverses for health assessment, with OPT participants reporting better health compared to Pilot, as the OPT population was not specifically targeting diseased individuals ($p < 0.01$).

Chart 1



Comparisons by Domains and Items

Table 1 reveals that the OPT participants reported significantly less dependence on medications compared to the pilot. This is once again a consistent and expected result as the OPT sample did not specifically target sick persons and was randomly drawn from the population at large. Yet, despite this difference, the OPT respondents reported significantly more pain and discomfort (at 21.2% poor or very poor compared to 3.6% very poor and 12.9% poor for Pilot); energy and fatigue problems (at 23% poor or very poor compared to 16.5% for Pilot); more sleep problems (31.7% for the OPT compared to 21.4% for Pilot); mobility problems (15.4 for OPT compared to 14.5%); activities of daily living problems (18.7% for OPT compared to 16.2% for Pilot), and significantly less satisfaction with the capacity to work (66% for OPT compared to 20.3% for Pilot). Pearson’s correlations coefficients (see Appendix B) assured that all the items in the physical health domain correlated strongly with the domain they were intended for, and that they did not cross-correlate more strongly with other domains, particularly the psychological domain (Appendix A). The results are therefore suggestive of physical health problems with origins possibly rooted in the difficulties and distress of daily life, reflecting themselves on physical health, perhaps through the somatization of the distress of ongoing conflict, deprivation and poverty.

Table 1: Physical Health – Comparative Percentages

Scale points/domains and facets	1 poor QOL	2	3	4	5 Good QoL
Physical health					
Pain and discomfort Pilot (p<0.01)	3.6	12.9	21.4	26.8	35.2
Pain and discomfort OPT/bref3	5.3	15.9	14.4	26.3	38.2
Energy and fatigue Pilot (p<0.01)	2.9	11.5	31.4	36.5	17.6
Energy and fatigue OPT/bref10	5.2	17.8	36.7	30.7	9.6
Sleep and rest Pilot (p<0.01)	4.6	16.8	22.5	38.6	17.5
Sleep and rest OPT/bref16	7	24.7	13	46.2	9
Dependence on medications Pilot (p<0.01)	5.9	15.9	18.6	24.4	35.2
Dependence on medications OPT/bref4	4.1	14.8	13.3	28.1	39.7
Mobility Pilot (p<0.01)	3.7	10.8	21.9	36.1	27.4
Mobility OPT/bref15	4.1	11.3	10.2	45.4	29
Activities of daily living Pilot (p<0.01)	2.7	13.5	24.5	44.5	14.8
Activities of daily living OPT/bref17	3.3	15.4	20.5	53.9	6.8
Working capacity Pilot (p<0.01)	4.8	15.5	24.6	40.2	14.9
Working capacity OPT/bref18	8.6	57.4	13.9	14.3	5.8

Cronbach’s $\alpha = 0.853$

Table 2 outlines Pilot and OPT reports related to the psychological domain, with OPT respondents reporting significantly less positive feelings, more negative feelings, less self esteem, less ability to think and concentrate, and less satisfaction with oneself compared to Pilot. In contrast, OPT respondents also reported more satisfaction with body image, perhaps influenced by the respondents' health status, but also because life, including body image, can be perceived in the local culture as 'given or dictated' and is to be accepted without questioning.

Table 2: Psychological Domain – Comparative Percentages

Scale points/domains and facets	1 poor QOL	2	3	4	5 Good QoL
Psychological					
Positive feelings Pilot (p<0.01)	4.9	11.9	35.8	35.1	12.3
Positive feelings OPT/bref05	11.4	26.8	41	18.6	2.2
Negative feelings Pilot (p<0.01)	3.2	12.7	25.4	41.7	17
Negative feelings OPT/bref26	13.2	10.7	31.4	34.4	10.2
Self esteem Pilot (p<0.01)	3	12.2	28	43.7	13
Self esteem OPT/bref6	9.5	12.3	27.8	40.2	10.3
Thinking learning memory concentration Pilot (p<0.01)	1.7	11.2	34	41.3	11.7
Thinking learning memory concentration OPT/bref7	5.3	20.4	35.2	32.1	7
Body image Pilot (p<0.01)	2.8	9.6	29.3	36.2	22.1
Body image OPT/bref11	0.7	4.8	33.5	39.4	21.6
Spirituality and personal belief Pilot (p<0.01)	4.1	10.7	27.9	38.8	18.6
Satisfaction with oneself/bref19	1.7	10	13.4	61.6	13.4

Cronbach's α =0.688

Table 3 compares Pilot and OPT responses to questions in the social domain. It was not possible to calculate the Cronbach's α for this domain as the sex life question was omitted from the OPT study due to cultural consideration. Comparing the results of the two remaining questions, the table demonstrates that OPT respondents reported significantly better satisfaction with personal relationships compared to the Pilot. Furthermore, this was the only domain where OPT respondents reported better QOL compared to the Pilot. These results are not surprising as Palestinian culture is collectively based, and social support and social cohesion are strong, and the political and economic history and realities that people endured and continue to endure require high levels of community cohesion for communal survival.

Table 3: Social Domain- Comparative Percentages

Scale points/domains and facets	1 poor QOL	2	3	4	5 Good QoL
Social					
Personal relations Pilot (p<0.01)	2.4	9.7	23.1	46.3	18.4
Personal relations OPT/bref20	1.8	6.5	13.4	61.8	16.5
Practical social support Pilot (p<0.01)	2.5	8.4	26.5	44.8	17.8
Practical social support OPT/bref22	4.5	11.3	18	55.7	10.4

Cronbach's α = unidentifiable

Table 4 reveals significantly higher dissatisfaction levels among OPT respondents compared to Pilot with every item in the environmental domain: 42.1% of OPT respondents reporting poorly for satisfaction with financial resources compared to 27.2% for the Pilot; a very high of 75.8% for access to recreation and leisure for the OPT compared to 28.5% for the Pilot; 45.4% for poor satisfaction with physical safety and security for the OPT compared to 13.7% for the pilot, and 42.8% for poor satisfaction with the physical environment for the OPT compared to 13.5% for the Pilot.

Table 4: Environmental Domain- Comparative Percentages-

Scale points/domains and facets	1 poor QOL	2	3	4	5 Good QoL
Financial resources Pilot (p<0.01)	8.1	19.1	37	25	10.9
Financial resources OPT/bref12	8.1	34	47.3	7.6	2.9
Information and skills Pilot (p<0.01)	2.9	11.2	32.1	38.3	15.4
Information and skills OPT/bref13	5.6	26.8	44.1	20.2	3.3
Recreation and leisure Pilot (p<0.01)	7.3	21.2	31.2	28.2	12
Recreation and leisure OPT/bref14	43.3	32.5	18.1	5.4	0.7
Home environment Pilot (p<0.01)	3.5	9.3	21	43.4	22.9
Home environment OPT/bref23	5.2	20.8	21.2	45	7.8
Access to health and social care Pilot (p<0.01)	2.9	10.2	26	45.7	15.2
Access to health and social care OPT/bref24	4.7	21.7	16.1	52.3	5.2
Physical safety and security Pilot (p<0.01)	3.8	9.9	32.1	41.9	12.3
Physical safety and security OPT/bref8	21.1	24.3	32.8	19.4	2.3
Physical environment Pilot (p<0.01)	3.9	9.6	36.8	38.2	11.5
Physical environment OPT/bref9	16.7	26.1	36.3	18	3
Transport Pilot (p<0.01)	4.4	11.3	22.5	42.1	19.8
Transport OPT/bref25	6.3	23.3	14.7	50.8	4.9

Cronbach's α =0.726

Comparing Means – Pilot and OPT

Comparing with the 23 countries participating in the WHO Pilot, the OPT scored significantly lower (at the 5% significance level) than all of the countries with the exception of Argentina for the physical, psychological and environmental domains, and better for the social domain, but not the best (5 countries ahead). Table 5 highlights some of the differences between the OPT and the lowest, middle and highest scoring countries in the Pilot. Even with the physical domain, where the Pilot included sick persons and the OPT sampled persons from the general population, OPT responses were significantly worse than the Pilot responses for all countries of both the developed and developing world, with the exception of Argentina. ⁸

Table 5: Pilot Overall, OPT, and elected Pilot Countries

Country	Physical Domain 1		Psychological Domain 2		Social Domain 3		Environmental Domain 4	
	Mean*	SD	Mean*	SD	Mean*	SD	Mean*	SD
Total all countries	16.2	2.9	15	2.8	14.3	3.2	13.5	2.6
Argentina/lowest pilot scores	12.1	2.2	10.6	2.9	10.8	3.5	10.7	2.3
OPT	14.2	3.2	13.3	2.5	14.8	3.1	11.2	2.3
Israel	15.5	3	14.2	3	13	3.8	12.6	2.6
India/New Delhi	15.9	2.9	14.2	2.7	13.9	3.7	12.1	2.8
Netherlands/highest scores	18.3	3	16.6	2.8	15.8	3.3	15.9	2.8

* Domain means are estimated on a range from 4 to 20.

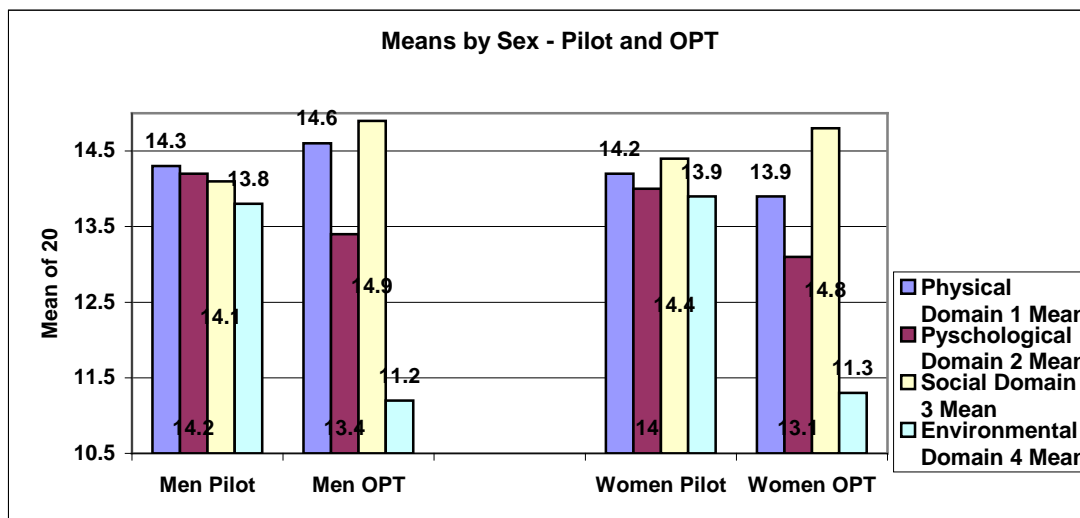
* The difference between OPT means and that of the all countries considered was significant at 0.05 level for all domains.

Comparing means by Pilot Countries Overall and Sex

Chart 2 demonstrates that OPT men report significantly better physical health than the Pilot at a mean of 14.6 for the PQoL compared to 14.3 for the Pilot, which is expected as our OPT sample did not specifically include sick persons. Yet despite the fact that the OPT sample did not target sick women, OPT women nevertheless report significantly worse physical health compared to Pilot women (13.9 versus 14.2), again suggesting an influence of the distress of living in war like conditions on physical health through a possible somatization pathway, but only for women. It is also interesting to note that the difference between men and women’s reports is significantly larger for the OPT respondents compared to the Pilot, again suggesting a physical health problem among OPT women that is not due to a defined disease to a larger extent than men, but also to a larger extent than Pilot women compared to their men.

OPT men and women furthermore reported significantly worse psychological health than Pilot men and women each, and OPT women report worse psychological health than OPT men, a finding that is consistent with our view that psychological health may have a bearing on physical health among women. Again, OPT men and women report significantly better social health compared to Pilot men and women each.

Chart 2: Comparing means by Pilot Countries Overall and Sex



$p < 0.05$ for all

Comparing means by Pilot Countries Overall and Age

Table 6 summarizes the comparison of means for Pilot countries overall and the OPT by age groups. OPT respondents scored significantly better physical health than Pilot at ages 18-20 and 31-40 (at the 5% significance level), but not for the age group 21-30, where the results were comparable to those of the Pilot, and age groups 41-50, 51-60 and 60+ where the OPT respondents scored significantly worse for this domain compared to the Pilot.

OPT respondents at all ages reported significantly worse psychological health status than Pilot (at the 5% significance level), again reinforcing our view that the misery of life and social suffering of warlike conditions must have an exacting impact on psychosocial health. However, OPT respondents scored significantly better than Pilot in the social domain for all age groups except those 18-20 and 61+ years old where the results were comparable to those of the Pilot (at 5% significance level). Finally, OPT respondents consistently reported worse environmental health than the Pilot for all ages (at the 5% significance level).

Table 6: Comparing means by Pilot Countries Overall and Age

Age	Physical Domain 1		Psychological Domain 2		Social Domain 3		Environmental Domain 4	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
18-20 Pilot	15.6	2.9	14.8	2.8	14.9	3.1	14.4	2.4
18-20 OPT	15.8	2	14	2.4	14.9	3.4	11.6	2.3
21-30 Pilot	15	2.9	14.3	2.8	14.5	3.4	13.7	2.6
21-30 Opt	15	2.5	13.6	2.4	15.1	3.1	11.5	2.4
31-40 Pilot	14	3	13.9	2.8	14	3.2	13.6	2.7
31-40 OPT	14.7	2.8	13.5	2.2	14.8	2.9	11.2	2.3
41-50 Pilot	13.9	2.9	14	2.7	14.1	3.1	13.9	2.6
41-50 OPT	13.3	3.5	12.9	2.6	14.6	2.9	10.9	2.3
51-60 Pilot	13.3	2.9	13.8	2.8	14.1	2.9	14	2.6
51-60 OPT	11.7	3.4	12.3	2.3	14.9	2.9	10.8	2.1
61+ Pilot	14.2	3	14.1	2.8	14.2	3.2	13.8	2.6
61+ OPT	11	3.9	11.7	3	14.4	3.2	11	2.7

Comparisons within the OPT-QoL determinants

Using 12 on the scale of 4 to 20 as a cut off point for less than good QoL (and also the cut off point that is usually employed for self rated health as well), responses above 12 were recoded as good, and 12 or below as less than good. Overall, 24.4% of OPT respondents reported less than good physical health, 34.5% psychological, 23.7% social and a high of 65.8% less than good environmental health.

Table 7 reveals worse physical health among OPT women compared to men. It also demonstrates a significant trend of declining QoL with rising age for all domains except for the social domain. Table 7 also indicates a declining QoL with lesser education for all the domains except for the social domain. There were no differences between the psychological and social domain responses and locale (urban, rural, refugee camp), but important differences in the physical and environmental domains. Rural dwellers reported significantly worse physical health compared to urban and refugee camp dwellers, despite the fact that there were appreciable differences in mean ages of respondents from the three locales. In contrast, camp dwellers reported significantly worse environmental health. Finally, regional variations in responses to items in the four domains were also evident, with the North West Bank respondents reporting significantly worse QOL for the physical and environmental domains, but not for the psychological and social domains, compared to other regions, even the Gaza Strip.

Table 7: QOL Domain Reports by Selected Determinants – Percentages of Determinant

	Physical Domain 1	Pyschological Domain 2	Social Domain 3	Environmental Domain 4
Less than Good				
Sex				
Males	20.9	34.6	25	67.5
Females	28.1	34.2	22.4	64
p=	0.005	0.47	0.185	0.133
Age				
18-29	9.8	27.8	21.7	61.2
30-49	24.3	33.5	24.3	66.8
50-86	60.2	52.8	26.7	74.4
p=	<0.000	<0.000	0.395	0.007
Education				
Preparatory or less	33.3	41.2	23.9	69.7
Secondary	13.6	26.6	22.4	60.2
Post secondary	8.4	21.4	25.2	59.7
p=	<0.000	<0.000	0.802	0.006
Work of househead				
Part-time	25.7	39	16.2	63.2
Full-time	17.5	27.2	23.2	61.9
Unemployed	29.7	42.6	26.4	75.7
p=	0.002	<0.000	0.157	0.007
Locale				
Urban	22.5	31.8	23.6	61.7
Rural	30.3	37.4	23	68.5
Camp	21.7	39.2	25.3	75.3
p=	0.031	0.106	0.853	0.003
Region				
North WB	33.7	39	20	74.8
Central WB	24.9	37.6	29.4	64.6
South WB	20.3	34	23.4	61.4
Gaza	19.4	29.4	23.3	61.6
p=	<0.000	0.063	0.127	0.003

Influence of political determinants on QoL scores

a. Crossing checkpoints, living close to the Separation Wall and settlements:

Responses from the Gaza Strip were excluded from this analysis, given that in December of 2005 the Israeli army withdrawal had already taken place, and therefore crossing checkpoints and living close to settlement no longer applied, and because the separation wall is being built on the West Bank only. For the remaining West Bank respondents, 14.1% reported that they had to cross one or more checkpoints a lot in order to reach work or school or services, 23.9% sometimes and the rest (62%) rarely or never; 19.7% reported that they live close to the Separation Wall; and 26.6% reported that they resided close to an Israeli settlement.

Table 8: QOL by Checkpoints, Wall, Israeli Settlements- Percentage of Political Determinants

QOL	Crossing Checkpoints	Rarely or Never	Living Close to Separation Wall		Living Near an Israeli Settlement	
			Yes	No	Yes	No
	A lot					
Physical Domain						
Good			66.4	74.4		
Less than good			33.6	25.6		
Social Domain						
Good					70.3	78.8
Less than Good					29.7	21.2
Environmental Domain					73.7	65.8
Good	17.9	35.9	23.7	34.4	26.3	34.2
Less than Good	82.1	64.1	76.3	65.6	73.7	65.8

P<0.05 for all

Table 8 indicates a significantly worse QOL status for the environmental domain for respondents who reported having to cross checkpoints “a lot” to get to work or school or services, and living near the Separation Wall or an Israeli settlement. Respondents who live close to the Separation Wall also reported significantly worse QOL for the physical domain, and those living near an Israeli Settlement significantly worse QOL for the social domain. Interestingly, we found no relationship between these political determinants and the psychological domain.

Respondents were also asked about the extent to which they are affected by closures and siege, the presence of the Separation Wall (for the West Bank only), the conflict with Israel and internal Palestinian political problems: 78.5% reported that they were affected a lot or completely by the closures and siege; 80% by the political conflict with Israel; 59.2% by the internal Palestinian situation; and for those on the West Bank, 62.7% by the Separation Wall, even though only 19.7% reported that they lived close to the Separation Wall, as its effect is beyond proximity to home, and extends to inability to reach work, school and services in other areas.

Moreover, significant associations were found between the environmental domain and the effect of political conflict with Israel question, (at the 5% significance level), the effect of closures and siege (at the 1% significance level), as well as the effect of the internal Palestinian political situation (at the 5% significance level), with increasing reports of the negative effects of these factors worsening environmental Qol reports, and pointing to the political context as an important element to include Palestinian QOL assessments.

b. Distress

We developed a distress scale out of responses to selected Palestinian QoL questions that we had added to the original WHOQOL-Bref. Those were: inability to control life, inability to cope, feeling worried, frustrated, incapacitated, humiliated, lonely, anxious, sad, angry and fed up, including only the ‘fairly often’ or ‘very often’ responses. The Cronbach’s α was 0.868, demonstrating a good internal consistency of this scale. Table 9 clearly indicates the influence of distress on QoL for all domains.

Table 9: QOOL Domain Reports by Distress- Percentage of Distress Group

	No Severe Distress	Up to 5 Severe	6-11 Severe
Physical Domain			
Less than Good	7.6	18.6	43.1
Good	92.4	81.4	56.9
p<0.01			
Psychological Domain			
Less than Good	9.9	28.6	59.1
Good	90.1	71.4	40.9
p<0.01			
Social Domain			
Less than Good	15.6	17.8	35.9
Good	84.4	82.2	64.1
p<0.01			
Environmental Domain			
Less than Good	43	63.1	85.2
Good	57	36.9	14.8
p<0.01			

c. Fear of uncertainty scale

Previous fieldwork, focus group discussions with various segments of the Palestinian population, analyses completed on other data sets, and the personal experience of some of the authors of this report had indicated that an important negative aspect of people’s lives in the OPT pertains to fears and uncertainties. This prompted us to include additional questions to the WHOQOL-Bref that are relevant to the Palestinian QoL and that can help elucidate its determinants. As in the distress scale, the argument is that fears and uncertainties are bound to influence QoL. Utilizing these Palestinian QoL questions and including only the ‘very much’ and ‘extreme amount’ responses, we developed a fear and uncertainty scale, which included reports pertaining to: fear for oneself, family, of not providing for family, losing income, losing home, losing land, displacement, chaos in Palestinian society, over the future of self and family (9 items). The Cronbach’s α was 0.820, demonstrating a good internal consistency of this scale as well.

Table 10: QOL Domain Reports by Fear of Uncertainty Scale- Percentage of Fear Group

A lot or extreme fears and uncertainties	0-3	4 to 6	7-all 9
Physical Domain			
Less than Good	15.3	29.2	29.1
Good	84.7	70.8	70.9
p<0.01			
Psychological Domain			
Less than Good	23.3	40.2	40.5
Good	76.6	59.8	59.9
p<0.01			
Environmental Domain			
Less than Good	47.6	73.3	77.9
Good	52.4	26.7	22.1
p<0.01			

Table 10 reveals significant associations between Fear and Uncertainty and reports of less than good QOL for all except the social domain.

d. Societal freedom and freedom of expression scale

We also developed a scale for satisfaction with societal freedoms and ability to express oneself within family, neighborhood, community and at the national level, composed of 7 items: satisfaction with freedom afforded by family, by community, satisfaction with opinion expression at home, at school or work, in the neighborhood, in the community, and nationally. Once again, we selected the ‘very dissatisfied’ and ‘dissatisfied’ responses only to include in this scale, which demonstrated a good internal consistency at 0.711 with Cronbach’s α .

Table 11: QOL Domain Reports by Freedoms and Freedom of Expression Scale- Percentage of Freedoms Group

	Not Dissatisfied	1 to 3 Dissatisfied or Extremely	4-7 Dissatisfied or Extremely
Physical Domain			
Less than Good	19.8	28.2	26.2
Good	80.2	71.8	73.6
p<0.05			
Psychological Domain			
Less than Good	28.3	38.2	41.6
Good	71.7	61.8	58.4
p<0.01			
Social Domain			
Less than Good	13.9	26.6	46.4
Good	86.1	73.4	53.6
p<0.01			
Environmental Domain			
Less than Good	56.1	72.3	75.2
Good	43.9	27.7	24.8
p<0.01			

Table 11 indicates that there are strong associations between all the QoL domains and the societal freedoms scale, with worsening QoL scores with rising dissatisfaction, and with the strongest association noted for the social domain, followed by the environmental domain.

Determinants of QoL scores

In order to definitively demonstrate the effect of selected possible determinants on life quality, multiple regression analyses were performed to adjust for possible confounders identified in the bi-variate analyses as being associated with the computed domain scores as an outcome, and in order to ascertain the need to include a political domain in the Palestinian WHOQOL-Bref. The four regression results are presented in Table 12 below.

Regression results suggest that the region of residence plays an important role in determining QoL assessments. Living in the southern region of the West Bank (including the governorates of Hebron, Bethlehem and Jericho) had the worst effect on QoL assessments compared to living in one of the West Bank's central governorates (Jerusalem and Ramallah and el-Bireh). The difference was significant at 1% level for three of the domains with the exception of the social domain. However, a trend remains present with the southern regions reporting the worst QoL scores for the social domain, but the result was not significant. These findings may be due to the presence of only two items in the social domain, perhaps too few to ascertain social life quality definitively, and indicate the need to include additional social domain facets in the Palestinian specific QoL instrument. Despite the limits imposed by the paucity of the social domain items, the inhabitants of northern region of the West Bank reported a better social life ($p < 0.01$) compared to those residing in the center regions of the West Bank.

Table 12 also reveals that rural dwellers report worse life quality for the environmental domain compared to those living in urban areas ($p < 0.01$). Moreover, camp dwellers reported worse life quality for all domains except the social domain, compared to those living in urban areas. These results were significant at the 1% level for the psychological and environmental domains and at the 10% level for the physical domain. With no differences between the sexes noted for the physical and psychological domains, women reported worse scores for the social domain compared to men. In contrast, women reported better scores for the environmental domain.

Although our sample was selected from the general population, with no intention of targeting sick individuals, regression results demonstrate the negative association between the age of the respondent and her/his assessment of her/his physical QoL ($p < 0.01$). However, QoL scores for the

environmental domain improved with age, contrary to initial impressions obtained in the bivariate analyses (at the 1% significance level), as did the scores for the social domain (at the 10% significance level), which improved with age, but were of borderline significance for the social domain.

Table 12: Regression Coefficients for Selected Determinants of QOL Domain Scores.

<i>Independent variables</i>	<i>Physical Domain</i>		<i>Psychological Domain</i>		<i>Social Domain</i>		<i>Environmental Domain</i>	
	β <i>coefficient</i>	<i>SE</i>	β <i>coefficient</i>	<i>SE</i>	β <i>coefficient</i>	<i>SE</i>	β <i>coefficient</i>	<i>SE</i>
Constant	96.041***	3.304	70.085***	3.037	78.351***	4.284	58.500***	2.862
<i>Ref.: Center WB</i>								
1. North WB	-2.138	1.366	0.824	1.256	3.699**	1.771	-1.588	1.183
2. South WB	-5.733***	1.445	-5.081***	1.328	-1.015	1.874	-5.059***	1.252
3. GS	0.059	1.498	1.952	1.377	2.024	1.942	-0.972	1.297
<i>Ref.: Urban</i>								
1. Rural	0.260	1.109	-0.303	1.019	1.327	1.437	-2.486***	0.960
2. Camp	-2.289*	1.360	-4.229***	1.250	-2.615	1.763	-3.412***	1.178
<i>Ref.: Male</i>								
Female	0.452	1.372	1.032	1.261	-3.058*	1.779	2.633**	1.188
Age (cont.)	-0.183***	0.043	0.005	0.040	0.092*	0.056	0.117***	0.037
Education (Cont.)	0.406***	0.125	0.415***	0.115	0.149	0.163	0.269**	0.109
<i>Ref.: Married</i>								
1. Single	0.757	1.376	0.224	1.265	1.276	1.784	4.039***	1.192
2.	-	4.872	-9.890**	4.478	5.266	6.317	2.335	4.220
Divorced/separated	13.116***							
3. Widowed	-3.180	2.323	-0.443	2.135	8.841***	3.011	-0.484	2.012
Household Head (1=yes; 2=No)	0.372	1.979	0.744	1.819	-3.065	2.566	-0.569	1.714
Employed Household Head (1=yes; 2=No)	-0.069	1.046	0.617	0.961	0.122	1.356	1.263	0.906
Breadwinner (1=yes; 2=No)	0.979	1.747	-1.425	1.606	-3.207	2.266	1.043	1.514
Refugee status (1=yes; 2=No)	0.009	1.014	-0.559	0.932	1.427	1.315	0.808	0.878
Checkpoint (1=yes; 2=No)	-2.340*	1.372	-0.574	1.261	0.394	1.779	-6.589***	1.189
Separation (1=yes; 2=No)	-1.196	1.528	2.141	1.404	3.617*	1.981	-1.275	1.323
Settlement (1=yes; 2=No)	-0.103	1.350	0.628	1.241	-3.219*	1.751	-0.134	1.170
Martyr (1=yes; 2=No)	-3.102***	1.009	0.392	0.927	0.421	1.308	-1.672*	0.874
Health status	-7.013***	0.424	-3.146***	0.390	-1.715***	0.550	-2.100***	0.367
Distress scale	-1.611***	0.154	-1.923***	0.142	-1.504***	0.200	-1.235***	0.134
Fear Uncertainty scale	-0.290	0.184	-0.073	0.169	0.231	0.238	-1.083***	0.159
Freedom expression scale	-0.966***	0.286	-0.670**	0.263	-2.628***	0.371	-1.712***	0.248
R ²	0.562		0.392		0.177		0.373	

* Significant at the 10% level

** Significant at the 5% level

*** Significant at the 1% level

Except for the social domain, where no differences among groups were noted, the more educated the individual is, the better life quality she/he possesses. This was highly significant ($p < 0.01$) for the physical and psychological domains and significant at the 5% level for the environmental domain. Divorced or separated individuals reported the worst psychological QoL ($p < 0.05$), and worse physical health ($p < 0.1$) than those married. Single respondent revealed a better environmental QoL. Finally, widowhood was surprisingly associated with a better social QoL.

Being obliged to regularly cross a military check-point or more to access work and/or pursuing different life activities had a negative impact on QoL assessments for the physical (at the 10% level) and environmental (at the 1% level) domains. Similar results were noted for living close to an Israeli settlement and the Separation Wall. However, those associations were not significant. While living close to an Israeli settlement has a negative impact on the social domain, living close to the "Separation Wall" seems to have a positive impact on the social QoL. Finally, reporting having had a family member killed or imprisoned by the Israeli army was negatively associated with the physical (at the 1% level) and environmental domains (at the 10% level)

Despite the global nature of the self-reported health status question, it was significantly associated with life quality for all domains (all at the 1% level), with worse self reported health status linked to worse QoL domain reports. Likewise, the distress and societal freedoms measures were also strongly associated with all QoL domains, with decreasing QoL with increasing distress and lack of freedom. However, the fear of uncertainty measure seems to only influence the environmental domain, with living with fears and uncertainties negatively influencing QoL (at the 1% level).

Finally, the independent variables introduced into the model (the QoL determinants) were found to explain variations between individuals ranging from 17.7% for the social domain, 37.3% for the environmental domain, 39.2% for the psychological domain, to a high of 56.2% for the physical domain. These results are an indication of the need for more contextually and culturally appropriate model of QoL for the social, environmental and psychological domains for the OPT. This may well be achieved through the introduction of two new domains, political and financial, which would entail an assessment of their effects on the model as well as possible cross-correlations with other domains.

DISCUSSION

A PQoL instrument was developed to assess the social suffering of the Palestinian people as a result of a recently intensified and chronic conflict. The PQoL instrument was initially based on the

WHOQoL-Bref tool, which was further developed to accommodate the local Palestinian context. The Palestinian pilot empirical study results demonstrate the general acceptability of the developed instrument and its appropriateness and usefulness in going beyond classical epidemiological indicators to illustrate the burden of Israeli military occupation and its associated consequences on the lives and well being of the population of the OPT.

The results obtained from the Palestinian pilot contained in this report were also compared to results obtained from 23 countries in both the developed and developing world. Despite the fact that the Palestinian sample was drawn from the general population and about half of the 23 country sample contained specifically targeted sick persons, Palestinians reported significantly worse QoL than all countries except one, and for all domains except for the social domain. Clearly, life quality in the OPT is not only worse than most other Pilot countries, but also deserves a deeper understanding of QOL determinants. In a country ravaged by war like conditions, the inclusion of a political domain seems to be essential.

Specifically, the findings demonstrate that OPT respondents suffer physical health problems (with the exception of dependence on medications) to a larger extent than the WHO Pilot. This was not a matter of cross-correlation of items in the physical domain with other domains, leading to the suggestion that physical health problems may be rooted in the difficulties and distress of life, and reflecting themselves on physical health, perhaps through the somatization of the distress of ongoing conflict and poverty. Indeed, this was prominently noted for OPT women compared to men. These results are consistent with findings of other studies completed in the OPT where a tendency of young women to somatize and men to change behavior when exposed to the violations and stressors of conflict were evident.⁹ Given that the age ranges for both sexes were comparable (mean=36.31 for men and 35.4 for women), the findings beg further investigation, perhaps especially in relation to the somatization effects of living in the distress of conflict and impoverishment for women compared to men.

Our findings also suggest the need to include more items into the social domain. With the exclusion of the sex life question, a necessity given the cultural context, the discriminatory power of the items within this domain is likely to have been reduced. While it is true the Palestinian culture is collective and communal support and cohesion have been important aspects of communal survival¹⁰, the relative incapability of this domain's items to adequately explain variations within the population is indicative of the need to re-assess and re-conceptualize this domain in ways that are more appropriate for the Palestinian context.

Persons living in the southern districts of the West Bank reported significantly worse QoL scores for all domains except the social domain. These results are likely due to the southern district of the West Bank having been affected to a larger extent by siege, closures, checkpoints and the erection of the separation wall compared to the central West Bank¹¹, and given that in December the Gaza Strip had already witnessed the Israeli army withdrawal, but not yet the intensification of closures and siege, and the shortage of bread and other foods that Gazans have been enduring since the post elections period.¹² Another possible influence on QoL in the southern districts, especially Hebron, is the peculiar nature of the basic demographic and socio-economic characteristics of Hebron District itself. The Hebron District is the largest district on the West Bank, housing an estimated population of about 525,000 persons, compared to 280,000 living in the central Ramallah district.¹³ It includes the largest concentration of towns that continue to live the rural way of life, as opposed to mostly villages for the rest of the West Bank. A comparative regional study on households completed in 1999 found that the Hebron District had significantly larger households, at 7.3, compared to 6.1 for the central West Bank and 5.7 for the northern West Bank. The highest levels of dependency and highest crowding levels were also found in the southern West Bank, reflecting the higher proportion of children within households. The most disadvantaged region for white collar and management occupations was also the southern West Bank, a reflection of lower educational levels and a higher engagement in occupations such as small cottage industries of the petty commodity production variety.¹⁴

OPT rural dwellers reported significantly worse physical health compared to urban and refugee camp dwellers, despite the fact that there were no appreciable differences in mean ages of respondents from the three locales. These results warrant further investigation, as it could be that the conditions of closures and siege have affected rural dwellers' access to services, health and otherwise, to a greater extent than urban and camp dwellers – with camps mostly located in or around urban areas, where many of the services are located. In contrast, camp dwellers reported significantly worse environmental health, for reasons that are understandable and visible, as camps are known to suffer from serious poverty and overcrowding within and outside homes, in addition to refugees having been particularly negatively affected by the infrastructure damage, spiraling poverty levels and intensified conflict since 2000.¹⁵ Refugee status did not play a role in explaining variations between individuals with regard to their assessment of their own QoL over the four domains. This indicates that it is not 'being a refugee' per se that is determinant, but more importantly the fact of living or not living in a refugee camp. These results are in line with results of international studies pointing to importance of neighborhood effects on health status.¹⁶

OPT women reported worse QoL scores for the social domain compared to men. This may be explained in terms of the restrictions of movement imposed on women in the local culture, limiting their abilities to form social and group relations beyond the domestic sphere. These restrictions on women may have even intensified since September 2000 and the escalation of conflict, with families worrying about the exposure of especially women and children to the violence around, prompting further restrictions on mobility outside the home, and negatively affecting women's social life. In contrast, women reported better scores for the environmental domain compared to men. These results are likely due to the fact that the environmental domain contains items related to financial status, when women are usually not the main breadwinners or those who are ultimately responsible for family finances, in contrast to men who assume the responsibility and burden of making ends meet in Palestinian society. The results are also likely to reflect the higher exposure of men to the violence of the outside world, given that men have to leave home daily to work or for other purposes, and face the checkpoints, the Wall and other forms of violation. These results, once again, point to the importance of the political context in determining life quality, and indicate the need to isolate political determinants from the environmental and social domains, currently absent in the WHOQoL-Bref structure.

Age was expectedly negatively associated with the physical QoL, yet despite initial impressions, positively associated with the environmental domain, and to a lesser extent, the social domain. These results may be due to the elderly having been relieved from the responsibility of providing for their households, influencing the environmental domain positively, and benefiting from the low opportunity cost on their time allowing them to socialize more easily, influencing the social domain positively. Education was important in determining QoL scores for all domains except the social domain, with increasing good QoL reports with increasing education, a finding comparable to the findings of the WHO 23 country Pilot study.¹⁷ These results are likely due to education improving a person's ability to rationalize and problem solve, and therefore potentially better take care of their health and better cope with external stressors.

Marital status seems to also influence QoL, with divorced/separated individuals reporting worse QoL scores for the physical and psychological domains. These are understandable results as those are mostly older women (50 years or over), and in Palestinian society, divorce and separation are usually associated with destitution and isolation. Single persons reported better environmental QoL, probably indicating the influence of their limited financial responsibility towards family members. Widows (52 of the 55 were women) reported better scores on the social domain, perhaps an indication of low opportunity cost on their time as well, having lost the husband and the responsibility for caring for him,

and perhaps even having gained some freedom to move outside the domestic sphere with increasing age and widowhood.

The finding that having to cross Israeli army checkpoints regularly to reach work, university or other daily activities influencing the physical and environmental domains negative is understandable, as those are barriers to the basic human right of the freedom of movement, but also entail a considerable amount of exposure to collective violence, such as exposure to tear gas, sound bombs, being humiliated, barred from entry, or waiting in line for hours to ensure passage, in addition to witnessing the violation of others.¹⁸ Those are bound to affect physical health. The negative influence of residing close to a settlement on the social domain may be explained as possibly due to the social and familial distress often imposed by settler violence.¹⁹ The negative influence of having experienced the death or imprisonment of a family member by the Israeli army on physical QoL could be due to individuals somatizing the pain resulting from this loss. But this is merely conjecture and requires further investigation. Self rated health status as well as the measures of distress and societal freedoms developed in this study were all strongly associated with all the domains of QoL, with decreasing QoL with increasing distress and decreasing freedoms. The fear of uncertainties measure was associated with the environmental domain only, with increasing fears decreasing QoL. These results indicate clearly the influences of the consequences of the socio-political context on life quality in a situation of ongoing conflict.

On the whole, the findings of this study point to the political context in which people live and its consequences as important determinants of life quality in the OPT, and that those cannot be omitted from any life quality assessment. The consistent negative impact of these political circumstances on the environmental domain indicates the need to develop a separate political domain for QoL assessment in the OPT, and other conflict affected zones. These results call for separating the environmental domain further into at least one additional domain – a political domain - and possibly another – a financial domain. The assessment of the feasibility of modifying the WHOQOL-Bref further in order to suit the Palestinian and conflict affected contexts will be left for later analyses. Perhaps future analyses could also incorporate distress, in lieu of an emotive component, to complete the paradigm of QOL as constituted by the construct, determinants, valuation and an emotive component.

The findings of this study corroborate the view that conventional explanations for poor health need to be surpassed, to include vital aspects, such as the way society is organized, as a causal framework.²⁰ In the case of the OPT, social, economic and political exclusion, with all what those carry in terms of consequences, such as the lack of basic freedoms, and living in fear and distress among other

factors, are part of our conception of a causal framework for poor life quality and health. While it is true that this is a cross sectional study, and as such, it is not possible to determine the direction of causality, one would think, out of simple common sense, that low life quality and poor health is determined by the consequences of the violations of war like conditions. These consequences are conceptualized as intermediate level determinants, which in turn are ultimately determined by the contextual factors that produce distress, fear, lack of freedoms, indeed, violations of all sorts of basic human rights, which in the case of the OPT is primarily the political context.

CONCLUSIONS

This study clearly indicates that Palestinian life quality is very poor indeed, the second worst in the world even when compared to a sample population half made of sick people from 23 developed and developing countries. More, as the data from the worst nation, Argentina, refer to the time of the country's economic collapse - now partly overcome - comparing the two countries today may not reflect the actual reality on the ground.

The significance of this study is perhaps less in terms of what it shows of Palestinians life quality (undoubtedly not very good, as it may be expected) than in the new perspectives it offers on how to comprehensively assess the human costs of conflicts. Though still incomplete, the tool that is being developed constitutes an important step forward in establishing ways of supporting people through times of suffering by eliciting the varied determinants of their health as well as the mechanisms they create (individually and collectively) to manage their suffering and get by in persistent war-like situations.

What the PQOL aims to measure is not simply the individual quality of life but the social quality, or more appropriately, the "social suffering" as a dynamic concept expressing the outcome of the integration of the multiple determinants (economic, social, political, cultural) of health and well being of a society. Addressing the current situation of Palestinians under the category of social suffering means bringing "into a single space an assemblage of human problems that ... results from what political, economic, and institutional power does to people...". These problems are "usually divided among separate fields: health, welfare, and legal, moral and religious issues. They destabilize established categories". Thus, "the trauma, pain and disorders to which atrocity gives rise are health conditions, yet they are also political and cultural matters." ²¹

The findings of this research also constitute good food for thought for the international community in order to conform their response to the ultimate needs of Palestinian people, up to the most distal

health determinants, i.e. basic human rights. In this regard, the study may be seen as an example of how treating a conflict as a broad public health problem may lead to a change in the conceptualization of the outcomes to be explained (i.e. from body count and medical indicators to social suffering due to violation of basic rights) as well as the international response to be undertaken (from humanitarian/medical aid to political conflict resolution and realization of human rights laws). Attempts to measure the social suffering of populations stricken by complex political emergencies are therefore part of an overall approach that places the demand for rights and justice at the center of their health. This in turn should call for a wider and global policy-oriented response, rather than to a simplistic medical-humanitarian help.

This study not only exposes what is happening as we write in its continuously deteriorating features, it also sheds light on the health outcomes yet to come in the longer term for the Palestinian population. Epidemiological research shows how we humans, as simultaneously social beings and biological organisms, literally incorporate, biologically, the material and social world in which we live, from fetal life to death, a process called “embodiment”.²² The accumulated effects of a life lived in a situation of unrelieved lack of protection, safety, and stability, building up incessant stressful experiences made of humiliation, frustration, physical and social deprivation, will all eventually emerge as manifest biological expressions in the form of increased risk of disease and premature death. The relative strength in the social domain, despite its paucity, showed by the study in term of solid social capital, social cohesion and personal relationships might however act as a protective factor against the negative effects of the embodiment process. Indeed, to be able to exhaustively describe what it is like being a Palestinian in today’s OPT, and to expose how acquiescence, resilience or resistance is generated among Palestinians is no less important than documenting the roughness of daily life.

As for the work in progress with the research instrument, in view of the extraordinary relevance and burden brought by the exposure to political circumstances such as the Israeli Separation Wall, physical safety and security as well as financial and other issues, presently included in the environmental domain of the PQOL tool, it is crucial to develop a separate, articulate political and perhaps financial domains. Clearly, life quality in the OPT is affected by a set of different forces which mostly pertain to the upper end of a hierarchy of determinants of obvious political and international legal nature. These indeed are the domains that would best be able to describe the pattern of individual and collective life experiences in a chronic, continuously changing and complex crisis such as the one in the OPT.

One of the main messages promoted by the WHO Commission on Social Determinants of Health²³ is that the causes of ill health are often related to social, economic and political circumstances and, consequently, “healthy” policies cannot avoid addressing the most distal determinants, “the causes the causes”²⁴. Overall, in the OPT, the realization of basic human rights, including the right of movement²⁵, and the respect for international laws is perhaps the root health determinant where genuine health promotion should start from.

Appendix A



Palestinian National Authority
Palestinian Central Bureau of Statistics
Quality of Life Survey 2005

All information in this questionnaire is intended for pure statistical purposes and will not be used for any other purpose. All information included in this questionnaire is considered confidential and is protected by the Statistics Law for the year 2000.

IDH00 – Serial questionnaire number in the sample: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		IDH01 – Questionnaire number in enumeration area: <input type="text"/> <input type="text"/>			
IDH02 – Directorate: _____ <input type="text"/> <input type="text"/>		IDH03 – Building address: _____			
IDH04 - Agglomeration: _____ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		IDH05 – Name of household head: _____			
IDH06 – Enumeration area number in the agglomeration: <input type="text"/> <input type="text"/> <input type="text"/>					
Interview register:					
- Visits schedule	IR01	Day	Month		
		<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	First visit	
		<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	Second visit	
		<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	Third visit	
IR02 – total visits number:		<input type="text"/>			
IR03 – Interview result: <input type="checkbox"/>		1	Completed		
		2	Partially completed		
		3	Household in travel		
		4	Nobody home		
		5	Refused to cooperate		
		6	No information is available		
		7	Others (specify): _____		
IR04 – Interview program:		Day	Month	Hour	
					Start – first visit

					End – first visit
					Start – second visit
					End – second visit
					Start – third visit
					End – third visit
IR05	Fieldworker:	IR06	Fieldworker No.:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Date:/...../
IR07	Supervisor:		Supervisor No.:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Date:/...../
IR09	Auditor:		Auditor No.:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Date:/...../
IR11	Data entry person:		Data entry person No.:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Date:/...../

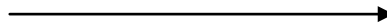
Selection of individuals 18 years old and above

1 – Find out the number of individuals in the household aged 18 years and above:

2 – List all household members aged 18 years and above:

Individual name	Rank	Selection

3 – Find the Rank of each individual (18 years and above) based on using names in alphabetical order (for names with the same first letter examine the second letter and hence over).



Letter	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
--------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4 – Use the random number table to select a household member, and 18 years old and above (intersection between number of individuals 18 years old and above and the table's sign as inserted on the questionnaire's cover)

Random Selection Table

Table sign:	If the number of household members aged 18 years and above are:					
	1	2	3	4	5	>=6
	Select the individual ranked the:					
A	1	1	1	1	1	1
B1	1	1	1	1	2	2
B2	1	1	1	2	2	2
C	1	1	2	2	3	3
D	1	2	2	3	4	4
E1	1	2	3	3	3	5
E2	1	2	3	4	5	5
F	1	2	3	4	5	6

5 – Put a sign beside the selected household member.

The Palestinian Central Bureau of Statistics is currently conducting a study to assess the Quality of Life of Palestinian people. To begin, I would like to ask you some general questions about yourself.

H1	Name: _____	
H2	Sex? 1. Male 2. Female	<input type="checkbox"/>
H3	What is your date of birth (Day/Month/Year)?	Day Month Year <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
H4	To the fieldworker: calculate the age from the date of birth in H3 and register the answer in number of complete years. In case the date of birth is unknown, ask about the age and register it. Register (98) for "I do not know".	<input type="text"/> <input type="text"/>
H5	What is the number of schooling years that you completed with success? To the fieldworker: Register (00) if the number of schooling years is less than 1 year; register (99) for "I do not know".	<input type="text"/> <input type="text"/>
H6	What is your education status?	<input type="text"/> <input type="text"/>
	01 Illiterate 02 Alphabetic 03 Primary school 04 Preparatory school 05 Secondary school 06 Diploma 07 Bachelor 08 High diploma 09 Masters 10 Ph.D. 99 I do not know	
H7	What is your marital status?	<input type="checkbox"/>
	1. Single 2. Fiancé/e 3. Married 4. Divorced 5. Widowed 6. Separated	

H8	What is your relationship to the household head?	01 Household head (go to Q. H11) 02 Husband/Wife 03 Son/Daughter 04 Father/Mother 05 Brother/Sister 06 Grand-Father/Grand-Mother 07 Grand-Son/Grand-Daughter 08 Daughter-in-Law/Son-in-Law 09 Other relatives 10 Others	<input type="checkbox"/> <input type="checkbox"/>
H9	What is the relationship to the workforce, during the last week?	01 Working from 1-14 hours 02 Working 15 hours and more 03 Absent from work and will return back 04 Unemployed but used to work 05 Unemployed, never worked 06 Full-time student 07 Full-time housewife 08 Incapacitated, cannot work 09 Do not work and do not seek to work 10 Do not work and do not seek to work due to feeling hopeless from finding a work 11 Others (if the answers is 5-11, go to H11)	<input type="checkbox"/> <input type="checkbox"/>
H10	What type of work did you do, in detail?	Main job: _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
H11	What is the relationship of the household head to the workforce, during the last week?	01 Working from 1-14 hours 02 Working 15 hours and more 03 Absent from work and will return back 04 Unemployed but used to work 05 Unemployed, never worked 06 Full-time student	<input type="checkbox"/> <input type="checkbox"/>

		07 Full-time housewife 08 Incapacitated, cannot work 09 Do not work and do not seek to work 10 Do not work and do not seek to work due to feeling hopeless about finding a work 11 Others (if the answers is 5-11, go to H13)	
H12	What type of work did the household head do, in detail?	Main job: _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
H13	Are you the main breadwinner of the household?	1. Yes (go to question H16) 2. No	<input type="checkbox"/>
H14	Is the household's main breadwinner ...	01 Working from 1-14 hours 02 Working 15 hours and more 03 Absent from work and will return back 04 Unemployed but used to work 05 Unemployed, never worked 06 Full-time student 07 Full-time housewife 08 Incapacitated, cannot work 09 Do not work and do not seek to work 10 Do not work and do not seek to work due to feeling hopeless from finding a work 11 Others (if the answers is 5-11, go to H16)	<input type="checkbox"/> <input type="checkbox"/>
H15	What type of work did the main breadwinner do, in detail?	Main job: _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
H16	Refugee status:	1. Registered refugee 2. Unregistered refugee 3. Non-refugee	<input type="checkbox"/>
H17	Do you have a health insurance?	1. Yes, one insurance only	<input type="checkbox"/>

		2. Yes, more than one insurance 3. No, go to Question H19	
H17a	What is the insurance that you use the most?	1. MoH insurance 2. Military insurance 3. UNRWA insurance 4. Social Affaire/Elderly ins. 5. Intifada/ Al-Aqsa insurance 6. Private insurance 7. Israeli insurance 8. Outside the country insurance	<input type="checkbox"/>
H18	Is all your family covered by the insurance?	1. Yes 2. No	<input type="checkbox"/>
H19	Do you need to cross one or more Israeli checkpoint (to go to work, school, etc.)?	1. A lot 2. Sometimes 3. Rarely 4. Never	<input type="checkbox"/>
H20	Do you live close to the "Separation Wall"?	1. Yes 2. No (go to H22) 3. Not-applicable, I am from the Gaza Strip (go to H22).	<input type="checkbox"/>
H21	Specify distance in meters: _____		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
H22	Does the "Separation Wall" have a negative direct impact on you?	1. Yes, a lot 2. Yes, somehow 3. No 4. No, It has a positive impact	<input type="checkbox"/>
H23	Do you live close to an Israeli settlement?	1. Yes 2. No (go to H25) 3. Not-applicable, I am from the Gaza Strip (go to H25).	<input type="checkbox"/>
H24	Does the Israeli Settlement have a negative direct impact on you?	1. Yes, a lot 2. Yes, somehow 3. No 4. No, It has a positive impact	<input type="checkbox"/>
H25	Did you lose (martyred, imprisoned, etc.) a relative	1. Yes 2. No	<input type="checkbox"/>

	(father, mother, brother, sister, husband, wife, son, daughter, uncle, aunt) due to the occupation?		
H26	In general, would you say your health is?	1. Excellent 2. Very Good 3. Good 4. Fair 5. Poor	<input type="checkbox"/>
<p><i>For the interviewer: please ensure to explain to the respondent the following:</i></p> <ol style="list-style-type: none"> <i>This assessment asks how you feel about your quality of life, health, and other aspects of your life.</i> <i>Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response.</i> <i>Please keep in mind your standards, hopes, pleasures and concerns.</i> <i>The following questions concern your evaluation of your Quality of Life in the last two weeks. They are standard, worldwide used questions to assess the quality of life of any individual in any cultural setting.</i> 			
BREF00	What is your definition of the "Quality of Life", in no more than ten words?----- ----- ----- -----		
BREF01	How would you assess the quality of your life?	1. Very poor 2. Poor 3. Neither poor nor good 4. Good 5. Very good	<input type="checkbox"/>
BREF02	To what extent are you satisfied with your health?	1. Very dissatisfied 2. Dissatisfied 3. Neither satisfied not dissatisfied 4. Satisfied 5. Very	<input type="checkbox"/>

		satisfied	
<i>The following questions ask you about how much you have experienced certain things in the last two weeks</i>			
1. Not at all 2. A little 3. A moderate amount 4. Very much 5. An extreme amount			
BREF03	To what extent do you feel bodily pain that prevents you from doing what you need to do?		<input type="checkbox"/>
BREF04	To what extent do you need any medical treatment to function in your daily life?		<input type="checkbox"/>
BREF05	To what extent do you enjoy your daily life activities?		<input type="checkbox"/>
BREF06	To what extent do you think there is a sense of purpose to your life?		<input type="checkbox"/>
BREF07	To what extent are you able to concentrate?		<input type="checkbox"/>
BREF08	To what extent do you feel safe in your daily life?		<input type="checkbox"/>
BREF09	To what extent do you consider healthy your physical environment?		<input type="checkbox"/>
<i>The following questions ask you about the availability for you of certain things in the last two weeks.</i>			
Not at all 2. A little 3. Moderately 4. Mostly 5. Completely			
BREF10	Do you have enough energy for everyday life?		<input type="checkbox"/>
BREF11	Are you able to accept your bodily appearance?		<input type="checkbox"/>
BREF12	To what extent do you have enough money to meet your needs?		<input type="checkbox"/>
BREF13	To what extent is the information that you need in your day-to-day life available to you?		<input type="checkbox"/>
BREF14	To what extent do you have the opportunity for leisure activities?		<input type="checkbox"/>
BREF15	To what extent does your physical/health status able you to get around?	1. Very poor 2. Poor 3. Neither poor nor good 4. Good 5. Very good	<input type="checkbox"/>
<i>The following questions ask about the level of satisfaction that you felt about various aspects of your life over the last two weeks.</i>			
1. Very dissatisfied 2. Dissatisfied 3. Neither satisfied not dissatisfied 4. Satisfied 5. Very satisfied			
BREF16	How satisfied are you with your sleep?		<input type="checkbox"/>
BREF17	How satisfied are you with your ability to perform your daily living activities?		<input type="checkbox"/>
BREF18	How satisfied are you with your capacity for work?		<input type="checkbox"/>

BREF19	How satisfied are you with yourself?	<input type="checkbox"/>
BREF20	How satisfied are you with your personal relationships?	<input type="checkbox"/>
BREF21	How satisfied are you with the support you get from your friends?	<input type="checkbox"/>
BREF22	How satisfied are you with the conditions of your living place?	<input type="checkbox"/>
BREF23	How satisfied are you with your access to health services?	<input type="checkbox"/>
BREF24	How satisfied are you with your transport?	<input type="checkbox"/>
<i>The following question asks about how often you felt some sensations during the last two weeks.</i>		
BREF25	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	1. Never 2. Seldom 3. Quite often 4. Very often 5. Always
<p><i>To the field worker: please ensure to explain to the respondent the following: Now I would like to ask you more about how you assess you Quality of Life. It might seem to you that some questions are being repeated but this is important to understand your situation as a Palestinian - and the Palestinian situation in general.</i></p> <ol style="list-style-type: none"> <i>1. As above, this assessment asks your feelings toward your quality of life, health, or other aspects of your life.</i> <i>2. Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response.</i> <i>3. Please keep in mind your standards, hopes, pleasures and concerns.</i> <i>4. We ask that you think about your life in the last two weeks.</i> 		
<i>The following questions ask you about how much you have experienced certain things in the last two weeks</i>		
1. Not at all 2. A little 3. A moderate amount 4. Very much 5. An extreme amount 6. inapplicable		
PQOL01	How much bodily pain do you have? (to fieldworker: if the answer is 1 go to PQOL03)	<input type="checkbox"/>
PQOL02	To what extent do you do what you have to do even if you have a bodily pain?	<input type="checkbox"/>
PQOL03	To what extent are you able to receive a medical treatment that you would need?	<input type="checkbox"/>
PQOL04	To what extent do you feel physically safe in your daily life?	<input type="checkbox"/>
PQOL05	To what extent do you feel emotionally safe in your daily life?	<input type="checkbox"/>

PQOL06	To what extent do you feel fear for yourself in your daily life?	<input type="checkbox"/>
PQOL07	To what extent do you feel fear for your family in your daily life?	<input type="checkbox"/>
PQOL08	To what extent do you currently feel worry/afraid (threatened) of not being able to provide for your family?	<input type="checkbox"/>
PQOL09	To what extent do you currently feel worry/afraid (threatened) of losing your/or your family income?	<input type="checkbox"/>
PQOL10	To what extent do you currently feel worry/afraid (threatened) of losing your home?	<input type="checkbox"/>
PQOL11	To what extent do you currently feel worry/afraid (threatened) of losing your land?	<input type="checkbox"/>
PQOL12	To what extent do you currently feel worry/afraid (threatened) of displacement or uprooting?	<input type="checkbox"/>
PQOL13	To what extent do you currently feel worry/afraid (threatened) of the chaos in the Palestinian society?	<input type="checkbox"/>
PQOL14	To what extent do you feel worry/afraid (threatened) about your future and the future of your family?	<input type="checkbox"/>
PQOL15	To what extent do you suffer from nightmares/bad dreams?	<input type="checkbox"/>
1. Not at all 2. A little 3. Moderately 4. Mostly 5. Completely 6. Inapplicable		
PQOL16	Do you accept your life as it is?	<input type="checkbox"/>
PQOL17	Does your household have enough money to meet your and your family needs?	<input type="checkbox"/>
PQOL18	Does you household borrow money to fulfill your or your family needs?	<input type="checkbox"/>
PQOL19	Are you or your household in debt now?	<input type="checkbox"/>
PQOL20	To what extent does your household postpone paying bills to manage your and your family needs?	<input type="checkbox"/>
PQOL21	Is the food that you desire easily available to you?	<input type="checkbox"/>
PQOL22	To what extent do you feel bored?	<input type="checkbox"/>
PQOL23	To what extent do you feel deprived? (not enough money, no freedom, no happiness, etc.)	<input type="checkbox"/>
PQOL24	To what extent is suffering part of your life?	<input type="checkbox"/>
1. Very dissatisfied 2. Dissatisfied 3. Neither satisfied not dissatisfied 4. Satisfied 5. Very satisfied 6. inapplicable		
PQOL25	To what extent are you satisfied with what you are doing right now (working, studying, homemaking)?	<input type="checkbox"/>

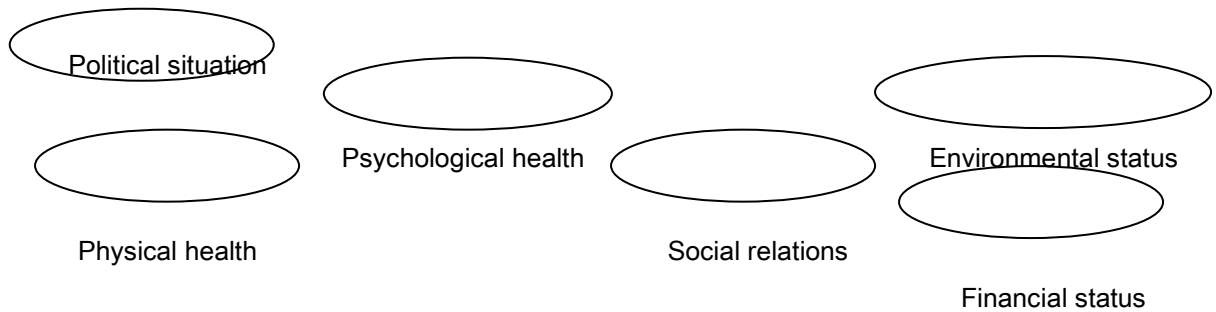
PQOL26	To what extent are you satisfied with your family?	<input type="checkbox"/>
PQOL27	To what extent are you satisfied with your/your family earnings?	<input type="checkbox"/>
PQOL28	To what extent are you satisfied with the crowding level in your home?	<input type="checkbox"/>
PQOL29	To what extent are you satisfied with your school/university/work place?	<input type="checkbox"/>
PQOL30	To what extent are you satisfied with your neighborhood?	<input type="checkbox"/>
PQOL31	To what extent are you satisfied with your community?	<input type="checkbox"/>
PQOL32	To what extent are you satisfied with the leadership of your community?	<input type="checkbox"/>
PQOL33	To what extent are you satisfied with your physical accessibility to school/university or workplace?	<input type="checkbox"/>
PQOL34	To what extent are you satisfied with your financial accessibility to school/university or workplace?	<input type="checkbox"/>
PQOL35	To what extent are you satisfied with your control over your life?	<input type="checkbox"/>
PQOL36	To what extent are you satisfied with your ability to plan for your daily life?	<input type="checkbox"/>
PQOL37	To what extent are you satisfied with your ability to plan for the future?	<input type="checkbox"/>
PQOL38	To what extent are you satisfied with the freedom afforded to you by your family?	<input type="checkbox"/>
PQOL39	To what extent are you satisfied with the freedom afforded to you by your community?	<input type="checkbox"/>
PQOL40	To what extent are you satisfied with the possibility of expressing your opinion at your home?	<input type="checkbox"/>
PQOL41	To what extent are you satisfied with the possibility of expressing your opinion at your school/university/work place?	<input type="checkbox"/>
PQOL42	To what extent are you satisfied with the possibility of expressing your opinion at your neighborhood?	<input type="checkbox"/>
PQOL43	To what extent are you satisfied with the possibility of expressing your opinion at your community?	<input type="checkbox"/>
PQOL44	To what extent are you satisfied with the possibility of expressing your opinion at the national level?	<input type="checkbox"/>
PQOL45	To what extent are you satisfied with your capacity to bear sudden medical expenses?	<input type="checkbox"/>
PQOL46	To what extent are you satisfied with the availability of electrical supplies?	<input type="checkbox"/>
PQOL47	To what extent are you satisfied with the quantity of available water?	<input type="checkbox"/>
PQOL48	To what extent are you satisfied with the quality of available drinking water?	<input type="checkbox"/>
PQOL49	To what extent are you satisfied with the availability of educational	<input type="checkbox"/>

	opportunity choices for you?	
PQOL50	To what extent are you satisfied with the availability of jobs around?	<input type="checkbox"/>
<i>The following question refers to how often you have felt or experienced certain things in the last two weeks:</i>		
1. Never 2. Seldom 3. Quite often 4. Very often 5. Always		
PQOL51	How often do you feel angry over what occupation does to you?	<input type="checkbox"/>
PQOL52	How often do you feel angry over what occupation does to your family?	<input type="checkbox"/>
PQOL53	How often do you feel humiliation by military occupation actions?	<input type="checkbox"/>
<i>The following five questions below ask you about how much you experienced some positive feelings over the last two weeks. Please indicate the answer that corresponds the most to what you felt.</i>		
1. All of the time 2. Most of the time 3. More than half of the time 4. Less than half of the time 5. Some of the time 6. At no time		
WB01	I have felt cheerful and in good spirits.	<input type="checkbox"/>
WB02	I have felt calm and relaxed	<input type="checkbox"/>
WB03	I have felt active and vigorous	<input type="checkbox"/>
WB04	I woke up feeling fresh and rested	<input type="checkbox"/>
WB05	My daily life has been filled with things that interest me	<input type="checkbox"/>
<i>The following questions are aim to get your opinions about aspects of your life in the last 30 days</i>		
1. Never 2. Almost Never 3. Sometimes 4. Fairly enough 5. Very often		
STRS01	To what extent did you feel unable to control the important things in your life?	<input type="checkbox"/>
STRS02	To what extent did you feel unable to cope with all the things that you had to do?	<input type="checkbox"/>
STRS03	To what extent did you feel worried?	<input type="checkbox"/>
STRS04	To what extent did you feel frustrated?	<input type="checkbox"/>
STRS05	To what extent did you feel incapacitated?	<input type="checkbox"/>
STRS06	To what extent did you feel humiliated?	<input type="checkbox"/>
STRS07	To what extent did you feel lonely?	<input type="checkbox"/>
STRS08	To what extent did you feel anxious?	<input type="checkbox"/>
STRS09	To what extent did you feel sad?	<input type="checkbox"/>
STRS10	To what extent did you feel angry?	<input type="checkbox"/>
STRS11	To what extent did you feel fed up with life?	<input type="checkbox"/>
<i>The following questions ask about how you feel right now</i>		
1. Not at all 2. Almost Never 3. Sometimes 4. Fairly enough 5. Very often		
EFF01	To what extent do you feel happy right now?	<input type="checkbox"/>

EFF02	To what extent do you feel stressed right now?	<input type="checkbox"/>
EFF03	To what extent do you feel appreciated and respected from the others right now?	<input type="checkbox"/>
EFF04	To what extent do you feel loved right now?	<input type="checkbox"/>
<i>The following questions concern the extent to which you are directly affected by certain contextual factors.</i>		
1. Not at all 2. A little 3. Moderately 4. A lot 5. Completely		
DET01	To what extent are you negatively affected by the ongoing conflict and the military occupation?	<input type="checkbox"/>
DET02	To what extent are you affected by closures and siege?	<input type="checkbox"/>
DET03	To what extent are you negatively affected by the "Separation Wall"? (For the fieldworker, put (if from Gaza Strip)	<input type="checkbox"/>
DET04	To what extent are you positively affected by the Internal Palestinian situation?	<input type="checkbox"/>
DET04a	To what extent are you negatively affected by the Internal Palestinian situation?	<input type="checkbox"/>
DET05	To what extent are you subjected to familial pressure?	<input type="checkbox"/>
DET06	To what extent are you affected by social pressure?	<input type="checkbox"/>
DET07	To what extent do you feel fear for your safety?	<input type="checkbox"/>
DET08	To what extent do you feel fear for the safety of your family?	<input type="checkbox"/>
DET09	To what extent does your family feel fear for your safety?	<input type="checkbox"/>
DET10	To what extent do you feel freedom at home?	<input type="checkbox"/>
DET11	To what extent do you feel freedom in the street?	<input type="checkbox"/>
DET12	To what extent do you feel freedom as a Palestinian?	<input type="checkbox"/>
DET13	To what extent do you feel able to express your opinion at home?	<input type="checkbox"/>
DET14	To what extent do you feel able to express your opinion in the street?	<input type="checkbox"/>
DET15	To what extent do you feel able to express political opinion?	<input type="checkbox"/>
DET16	To what extent are education facilities available for you?	<input type="checkbox"/>
DET17	To what extent are entertainment facilities available for you?	<input type="checkbox"/>
DET18	To what extent does your income/the income of your family enable you to fulfill your needs (educational, entertainment, etc.)?	<input type="checkbox"/>
DET19	To what extent are you able to physically access your school/university/working place?	<input type="checkbox"/>
DET20	To what extent are you able to financially access your	<input type="checkbox"/>

	school/university/working place?	
DET21	To what extent are you able to physically access health care services?	<input type="checkbox"/>
DET22	To what extent are you able to financially access health care services?	<input type="checkbox"/>
COMP	When you answered the above questions what were you comparing yourself to?	1. Yourself and your situation before the second Intifada. 2. To someone with a similar background as you. 3. To some ideal standards or the best imaginable situation. 4. More than one of the above.
		<input type="checkbox"/>

Based on analyzing your, and others, answers to the above questions we will be capable to identify and describe several domains of the Quality of Life of the Palestinian people, and how they assess themselves with regard to these domains. The domains are: physical health, psychological health, social relations, financial status, environmental status, and political domain. Could you please rank from the most important to the least important these Quality of Life domains, as you perceive them? Start with the component of your life quality that you perceive as being the most important in your assessment of how satisfied you are with your life.



RANK1	RANK21	RANK3	RANK4	RANK5	RANK6
1	2	3	4	5	6
[most important]					[least important]

Appendix B

Cronbach's Alpha for assessment of internal reliability:

Domain	Cronbach's α
Physical	0.853
Psychological	0.688
Social	Unidentifiable
Environment	0.726

Pearson correlation coefficients between items and domains' scores.

Item	Physical	Psychological	Social	Environment	
Physical	Q3	<u>0.79</u> ***	0.41***	0.11***	0.25***
	Q4	<u>0.78</u> ***	0.41***	0.14***	0.24***
	Q10	<u>0.72</u> ***	0.55***	0.26***	0.39***
	Q15	<u>0.77</u> ***	0.47***	0.20***	0.33***
	Q16	<u>0.55</u> ***	0.39***	0.20***	0.35***
	Q17	<u>0.75</u> ***	0.53***	0.29***	0.46***
	Q18	<u>0.75</u> ***	0.50***	0.27***	0.39***
Psychological	Q5	0.43***	<u>0.63</u> ***	0.20***	0.40***
	Q6	0.33***	<u>0.64</u> ***	0.19***	0.23***
	Q7	0.42***	<u>0.65</u> ***	0.22***	0.32***
	Q11	0.34***	<u>0.56</u> ***	0.20***	0.27***
	Q19	0.46***	<u>0.64</u> ***	0.39***	0.38***
	Q26	0.43***	<u>0.61</u> ***	0.19***	0.36***
Social	Q20	0.27***	0.33***	<u>0.82</u> ***	0.31***
	Q21	Unidentifiable	Unidentifiable	Unidentifiable	Unidentifiable
	Q22	0.21***	0.27***	<u>0.85</u> ***	0.32***
Environmental	Q8	0.31***	0.33***	0.20***	<u>0.61</u> ***
	Q9	0.15***	0.20***	0.20***	<u>0.57</u> ***
	Q12	0.36***	0.40***	0.18***	<u>0.58</u> ***
	Q13	0.36***	0.39***	0.21***	<u>0.57</u> ***
	Q14	0.27***	0.27***	0.20***	<u>0.49</u> ***
	Q23	0.21***	0.26***	0.29***	<u>0.60</u> ***
	Q24	0.30***	0.31***	0.22***	<u>0.61</u> ***
	Q25	0.28***	0.29***	0.22***	<u>0.63</u> ***

*: $p < 0.10$; **: $p < 0.05$; ***: $p < 0.01$

Spearman's rho correlation coefficients between items and domains' scores.

Item		Physical	Psychological	Social	Environment
Physical	Q3	<u>0.78</u> ***	0.41***	0.13***	0.26***
	Q4	<u>0.75</u> ***	0.41***	0.16***	0.25***
	Q10	<u>0.72</u> ***	0.53***	0.27***	0.40***
	Q15	<u>0.72</u> ***	0.47***	0.21***	0.33***
	Q16	<u>0.56</u> ***	0.37***	0.22***	0.34***
	Q17	<u>0.72</u> ***	0.51***	0.30***	0.45***
	Q18	<u>0.70</u> ***	0.50***	0.30***	0.40***
Psychological	Q5	0.43***	<u>0.62</u> ***	0.20***	0.40***
	Q6	0.33***	<u>0.62</u> ***	0.19***	0.23***
	Q7	0.40***	<u>0.65</u> ***	0.21***	0.32***
	Q11	0.36***	<u>0.54</u> ***	0.20***	0.25***
	Q19	0.47***	<u>0.62</u> ***	0.40***	0.36***
	Q26	0.42***	<u>0.61</u> ***	0.20***	0.39***
Social	Q20	0.31***	0.34***	<u>0.79</u> ***	0.31***
	Q21	Unidentifiable	Unidentifiable	Unidentifiable	Unidentifiable
	Q22	0.22***	0.28***	<u>0.87</u> ***	0.27***
Environmental	Q8	0.30***	0.33***	0.18***	<u>0.61</u> ***
	Q9	0.16***	0.19***	0.19***	<u>0.55</u> ***
	Q12	0.36***	0.39***	0.17***	<u>0.58</u> ***
	Q13	0.34***	0.37***	0.18***	<u>0.55</u> ***
	Q14	0.26***	0.28***	0.17***	<u>0.47</u> ***
	Q23	0.23***	0.25***	0.30***	<u>0.58</u> ***
	Q24	0.30***	0.30***	0.23***	<u>0.58</u> ***
	Q25	0.29***	0.30***	0.22***	<u>0.63</u> ***

*: p< 0.10; **: p<0.05; ***: p<0.01

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