

FINAL REPORT

April 2003 – December 2006

**Health Behavior in School-Aged Children (HBSC)
A Regional Cross-Cultural Study
Of Adolescent Health Behaviors
In the Middle East**

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(3) Executive Summary:

The status of health and well-being of adolescent school children holds serious implications for the development of any country. Especially in face of the realities of the armed conflict and instability of the Middle East addressing adolescent well-being and health is vitally important. Further more, due to these social circumstances, Israeli and Palestinian professionals and policy makers have never collaborated in obtaining joint scientific information and developing effective regional policies and programs to better the lives of their respective youth. The Health Behavior in School-Aged Children in the Middle East (HBSC-ME) research project gave – for the first time – the opportunity to do so. This major endeavor brought together lead researchers in Israel and the Palestinian authority to design and implement the first ever cross-cultural study and monitoring system of patterns of risk behaviors, mental and physical health indicators and social life circumstances of Palestinian and Israeli youth. This project has enabled the creation of professional research teams, both in Israel and in the Palestinian Authority, that have been working collaboratively throughout the research period. This includes the daily collaboration of doctoral and post-doctoral students, analyzing data, developing dissertations, and writing reports and draft publications together. The most significant achievement is by all means the establishment of a scientifically sound on-going regional research system based on representative large samples of school-children in Israel and the Palestinian authority – providing information and a platform for many years of information-based policy and intervention development and evaluation. By the end of this project period, the HBSC-ME has become recognized as the main "backbone" of information for the development and evaluation of adolescent health and well-being promotion policy and programs in the Middle East, and will affect the lives of millions of children in this region in the years to come. We have jointly developed, tested and implemented the methodology and questionnaire to sample and survey school-children in Gaza, the West Bank, Arab Israeli schools and Jewish Israeli schools. We developed a regional mandatory research protocol by which data were, and should be, collected in a scientifically sound nature, and in a manner compatible with the European HBSC. We adapted the methods developed in Europe to the nature and needs of the populations of the Middle East, validating and ensuring the data reliability and relevance. We developed – for the first time – procedures for implementing school-based surveys with representative sample techniques in the Palestinian Authority – with the help and full participation of the Palestinian Ministry of Education. We implemented two consecutive bi-annual regional surveys in 2004 and in 2006, totaling over 70,000 completed questionnaires from Palestinian and Israeli children ages 11-16. This provided us with a wealth of vital information, never before obtained, on the lives and social circumstances affecting the lives of Palestinian and Israeli school-children. Findings obtained from the analyses of the data have already shed light on many topics of vital interest – such as the effect of exposure to armed conflict events and the resilient factors in the social environments that can buffer such effects. These topics and findings are being disseminated and discussed in the numerous publications and reports that the HBSC-ME teams are producing.

Main products include: (a) the *regional and local data files* containing the information obtained from the representative sample of school-children, (b) a regional extensive report to be published and disseminated as a book entitled: "*Growing up in the Middle East: The lives and well-being of Palestinian and Israeli Youth*", (c) a new tradition of a bi-annual "*Regional Congress on Adolescent Well-Being and Health*" based on the HBSC-ME information, (d) scores of *joint scientific publications* covering a variety of topic areas, and finally, (e) a strong *on-going research collaboration* of the Israeli and Palestinian teams – including secured funding for the continuation of the regional effort.

(4) Research Objectives:

The main goal of the project was to establish regional cooperation in promoting the health and well-being of adolescents in the Middle East, by developing a collaborative cross-cultural study and monitoring system as well as to develop policies and strategies for the prevention of injuries, youth violence, risk behaviors and for the promotion of adolescent health and well-being in the region. Although adolescence is considered a relatively healthy period, the prevalence of risk behaviors increases while positive health behaviors decreases during this period. HBSC therefore places its emphasis on young people as a health promoting resource, enabling the development of important foundations for the promotion of positive choices about personal health practices. Therefore it is crucial to reach out to adolescents as an important target population for prevention. The data gathered through the school-based surveys and the analysis of the findings fulfills many research objectives. Among them are:

1. To investigate the epidemiology and determinants of patterns of health related risk behaviors associated with major health outcomes (e.g., smoking, eating habits, physical activity and safety practices).
2. To investigate the cross-cultural epidemiology of unintentional and intentional injuries among Palestinian and Israeli adolescent schoolchildren.
3. To investigate the epidemiology and determinants of youth daily violence, such as bullying, physical fights, vandalism, victimization and suicidal ideation and behavior.
4. To study the epidemiology of mental and physical health of Palestinian and Israeli youth.
5. To investigate the exposure to events related to armed conflict and to study the effects of these exposures on mental health, risk behaviors and social well-being of Palestinian and Israeli youth.
6. To identify major **modifiable** risk and resilience factors in the social environment (family, school, community and peers) to be later targeted by prevention policy and programs.

The main innovative aspect of this project is manifested it being the first major collaborative research effort to obtain scientifically sound information on the lives and well-being of Palestinian and Israeli youth. It is the first time ever that the Palestinian Authority has collected data systematically, on representative samples of school-children and on a vast array of topics vital for developing and evaluating policy and programs. It is the first time that Israeli and Palestinian adolescent health professionals have worked together sharing methodologies, knowledge and

experiences and planning future ways to promote youth well-being. It is the first time that the HBSC methodology and approach has been adapted to the Middle East unique circumstances, culture and needs. It is indeed notable that this Israeli-Palestinian cooperation has continued throughout the ups-and-downs of the peace process and sustained itself through highly problematic periods in the geopolitical development of the Middle-East. Such regional collaboration holds distinct advantages for improving the health of Palestinian and Israeli youth and building an ongoing permanent capacity to do so.

The dataset obtained from these cross-cultural surveys include information on:

Parents' involvement and Family culture:

- Parents involvement in the everyday life of the child
- Parents support in time of need
- Parents readiness and involvement in school matters
- Parents knowledge of adolescent well-being
- The seven measures of family culture in day to day life
- An accumulative measurement of dissociation feeling as oppose to connection feeling

School perceptions and Experiences

- School general perceptions (feelings towards school)
- Perceptions regarding rules and regulations
- Measurements regarding Teacher-Student relations
- Competitiveness, pressure from school etc.
- Latent drop-out measurements
- Perceptions of physical space and feeling of security

Community involvement and volunteering

- Involvement and volunteering in school roles
- Mandatory community involvement or other volunteering projects in school
- Involvement in youth clubs and youth organizations
- Volunteering in community organizations

Peer Relationships

- Patterns of socialization as oppose to loneliness and feelings of social rejection
- Patterns of socialization (types of friends, amount, gender etc.)
- Patterns of "hanging out" with friends after school (places and type)

Leisure activity:

- Volunteerism and community involvement
- Computer use
- TV watching

Mental Well-Being

- Psychosomatic symptoms
- Suicide ideation and attempt

- Self-value and self-confidence
- Happiness scales

Risk behaviors

- Tobacco smoking
- Alcohol consumption
- Drug-use
- Nutrition and eating habits
- Physical activity
- Sexual behavior
- Violence (bullying, weapon carrying, physical fights, victimization)
- Injuries
- Truancy and drop-out

(*) Pertinent literature:

Currie C. *The International HBSC Study: rationale, history and description*. Health and Health Behavior among Young People, a WHO International Report (HBSC), 2000

Currie C (1997). Health Behavior in School-Aged Children: A WHO Cross-National Survey (HBSC). Research Protocol for the 1997-98 Study. Edinburgh: Research Unit in Health and Behavioral Change.

Due P, Holstein BE, Lynch J, Diderichsen F, Nic Gabhain S, Scheidt P, Currie C, Harel, Y. and The Health Behavior in School Aged Children Bullying Working Group. "Bullying and Symptoms among School Aged Children: International Comparative Cross Sectional Study in 28 Countries". European Journal of Public Health. 15: pp 128-132 , 2005

Harel, Y., Kanny, D., and Rahav, G. (1997). *Youth in Israel: An International Perspective on Social Well-being, Health and Risk Behaviors*. Jerusalem: JDC-Brookdale Institute and Bar Ilan University (In Hebrew).

Harel, Y., "A Cross-National Study of Youth Violence in Europe", International Journal of Adolescent Medicine and Health, London, UK, vol. 11(3-4), pp. 121-134, 1999.

King, A., Wold, B., Smith, C.T. & Harel, Y. (1996) *The Health of Youth. A cross-national survey*. WHO Regional Publications, European Series No.69.

Laufer, A, Harel, Y., "The role of Family, Peers and School Perceptions in Predicting Involvement in Youth Violence", International Journal of Adolescent Medicine and Health, London, UK, vol. 15(3), 2004

Lissau, I., Overpeck, M., Ruan, J., Due, P., Holstien, B., Hediger M., Harel, Y., and the HBSC Obesity Working Group, " Body mass index, overweight and obesity in adolescents in Europe and the United States", Archives of Pediatric and Adolescent Medicine, Vol. 158, pp 27-33, 2004

Mazur J, Scheidt PC, Overpeck MD, Harel Y, Molcho M., "Adolescent Injuries in Relation HBSC-ME, Final Report – December 2007 – TA-MOU-00-M20-051

to Economic Status : An International Perspective. Injury Control and Safety Promotion, 8 (3): 179-182., 2001

Molcho, M., Harel, Y., and Lash, D., "Substance Use and Youth Violence: A Study among 6th – 10th Israeli School Children", The International Journal of Adolescent Medicine and Health, London UK, (16)3. pp 239-251, 2004

Nansel, T., Craig, W., Overpeck, M., Saluja, G., Ruan, J., Harel, Y., and the Bullying Analysis Group, "Cross-national consistency in relationship between bullying behaviors and psychosocial adjustment" Archives of Pediatric and Adolescent Medicine, 158: 730-746., 2004

Pickett W, Craig W, Harel Y, Cunningham J, Simpson K, Molcho M, Mazur J, Dostaler S, Overpeck M and Currie C., "Cross-national study of fighting and weapon carrying as determinants of adolescent injury", Pediatrics, Dec 2006; Vol 116: e855 - e863

Pickett W, Molcho M, Simpson K, Janssen I, Kuntsche E, Mazur J, Harel Y and Boyce W "Cross-national study of injury and social determinants in adolescents". Injury Prevention (BMJ Publications).2005:11, pp 213-218, 2005.

Pickett, W., Schmid, H., Boyce, W., Simpson, K., Scheidt, P., Mazer, J., Molcho, M., King, M., Dodeau, E., Overpeck, M., szmann, A., Szabo, M., and Harel, Y., "Multiple Risk Behavior and Injuries: An International Analysis of Young People", Archives of Pediatric and Adolescent Medicine, Vol. 156, pp: 786-793, Aug 2002

Smith-Khuri, E., Iachan, R., Scheidt, P., Overpeck, P., Pickett, W., Gabhainn, S., Harel, Y., and the HBSC International Violence Study Group, "A Cross-National Study of Violence-Related Behaviors in Adolescents", Archives of Pediatric and Adolescent Medicine, 158:539-544, 2003

Wold B. (1993). Health Behavior in School-Aged Children: A WHO Cross-National Survey (HBSC). Research Protocol for the 1993-94 Study. Bergen: Research Protocol for the 1997-98 Study. Research Center for Health Promotion.

(5) Methods and Results:

The HBSC study is rooted in the social and behavioral sciences with a "socialization perspective" as the conceptual framework. According to this perspective, the influence of various "arenas" (e.g., the family, school, friends and media) on young people's health and health related behavior are systematically explored. The WHO-HBSC has developed over the past several years state-of-the-art methodologies to conduct cross-cultural school-based studies on health and health related behaviors among mid-adolescent populations. These methodologies include methods for: selecting high priority focus areas and variables; developing and testing valid and reliable measures of these phenomena; translating linguistically and culturally concepts and questions to enable the collection of comparable

data across cultures; developing shared databases that enable cross-cultural analysis; and, cooperation between the research teams in interpreting the results and developing recommendations for policy and programs.

The HBSC-ME targeted 4 target populations of 11, 13 and 15 year-old school children: (1) Palestinian pupils in Gaza, (2) Palestinian pupils in the West Bank, (3) Arab Israelis and (4) Jewish Israelis.

During the first stages of the project, a regional mandatory research protocol was developed to assure comparability of data across the four target population groups. The protocol includes methods of sampling techniques, questionnaire development and implementation, and data management and analysis.

The regional HBSC questionnaire was developed on the bases of the European instrument but with major adaptations to make it fit into the circumstances and needs of the region. This process included focus-group discussions with adolescents in all 4 populations and several waves of piloting in the field.

The sample included about 2000 children in each of the three age groups in each of the four populations – totaling about 6000 children per population per survey – namely about 25,000 children in each survey. The sample unit was a class-room selected at random from the class-room register at the ministries of education. Each pupil that learns in a selected class-room became a sampled child.

The questionnaire included about 170 questions and was administered in-class for self-administration. It was totally anonymous and no individual identification was sought.

Data obtained from each of the 4 target populations was cleaned and joint into a regional data file analyzed jointly by the Palestinian and Israeli research teams.

A Regional Report entitled: "Growing up in the Middle East" has been compiled including extensive presentation of findings across the many topical areas covered by this unique study. The report will be disseminated widely to policy and decision makers as well as to adolescent health and education professionals in the region.

Finding are presented in the report in a variety of ways, stemming from simple cross-cultural tables, through bar-charts and even some logistic regression models presenting the odds of risk by level of exposure to different determinants.

Example of data presentation in tables:

Youth Violence

Table 8.3: percent of students who were bullied at least once in the past couple of months by gender, grade and population.

	Jewish Israeli			Arab Israeli			West Bank			Gaza			HBSC
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	EURO
6 th grade	40.8	35.8	38.3	64.2	54.2	59.0	60.8	53.6	57.5	57.6	44.9	50.1	38.6
8 th grade	36.2	24.7	30.1	56.5	42.1	49.1	58.0	51.3	54.4	55.5	47.4	51.0	37.0
10 th grade	25.5	16.0	20.1	47.3	40.8	43.5	46.7	45.9	46.3	51.5	45.0	48.2	28.0
Total (%)	34.7	25.4	29.7	56.3	45.6	50.5	55.4	50.3	52.8	54.8	45.7	49.8	34.7
N	2,425	2,732	5,157	2,711	3,193	5,904	3,611	3,719	7,330	2,740	3,357	6,097	158,004

* Variable M54 -Values 2 and above.

Fig. 8.3.a

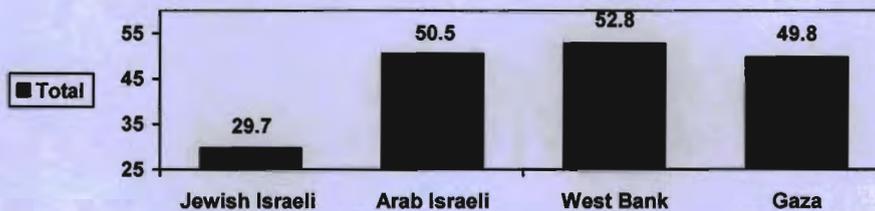


Fig. 8.3.b

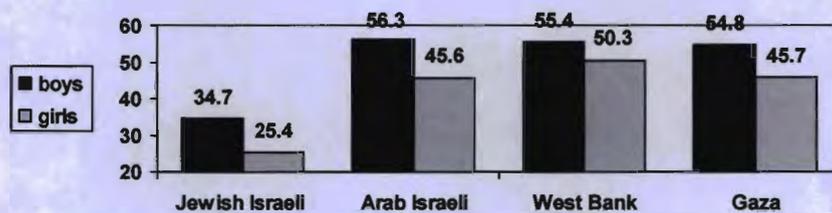
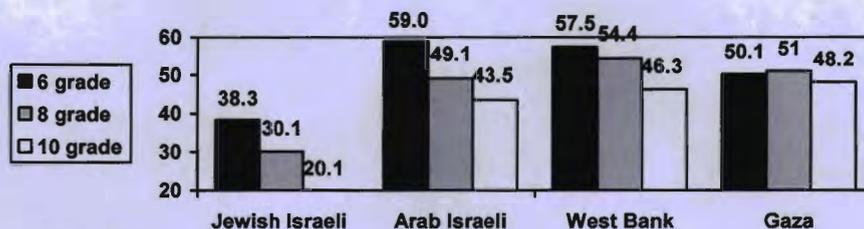


Fig. 8.3.c



Tables 8.3-8.4 present the percentage of students who reported being victims of bullying, to different degrees of severity. Table 8.3 presents the percentage of students who were bullied at least once in the previous couple of months by gender, grade and population. Among all four populations Jewish Israeli are less likely to be bullied by other students (29.7%) whereas West Bank students are most likely to be bullied by other students (52.8%). In all four populations girls tend to report being bullied by other students less than boys. Table 8.4 presents the percentage of

students who were bullied by other students two or three times or more in the previous couple of months by gender, grade and population. Among all four populations Jewish Israeli are less likely to be bullied by other students more than one time (11.4%) and the three other Arab student populations are much more likely be bullied by other students two or three times or more (Arab Israeli- 25/3%, West Bank- 26.9% and Gaza- 27.3%). Note that the HBSC European average stands at 14.3%; higher than the Jewish Israeli percentage but significantly lower than the other three populations. In all four populations girls tend to report experiencing bullying less than do boys.

Researchers analyzed data from the tables in broader categories and built scales which revealed results, likeness and differences, between the four populations. Statisticians built all scales and analyzed data using the one-way –ANOVA analysis of variables. Researchers used different variables in each section (comprising usually of many tables of data) and recoded these as binary variables using (0) as negative and (1) as a positive view. Statisticians then performed a post hoc analysis (Scheffe) on this data and calculated an alpha Cronbach reliability score for each scale. Detailed description of data as tables and graphs are in the report. For example, Researchers formed a cigarette smoking scale using 6 binary variables with (0) representing no smoking related activity to (6) six smoking related activities. Significant differences in the four populations showed the Jewish Israeli and West Bank populations have higher number of smoking related activities than the other two populations and the Gaza population had the lowest average smoking related activities. (Alpha Cronbach =0.614).

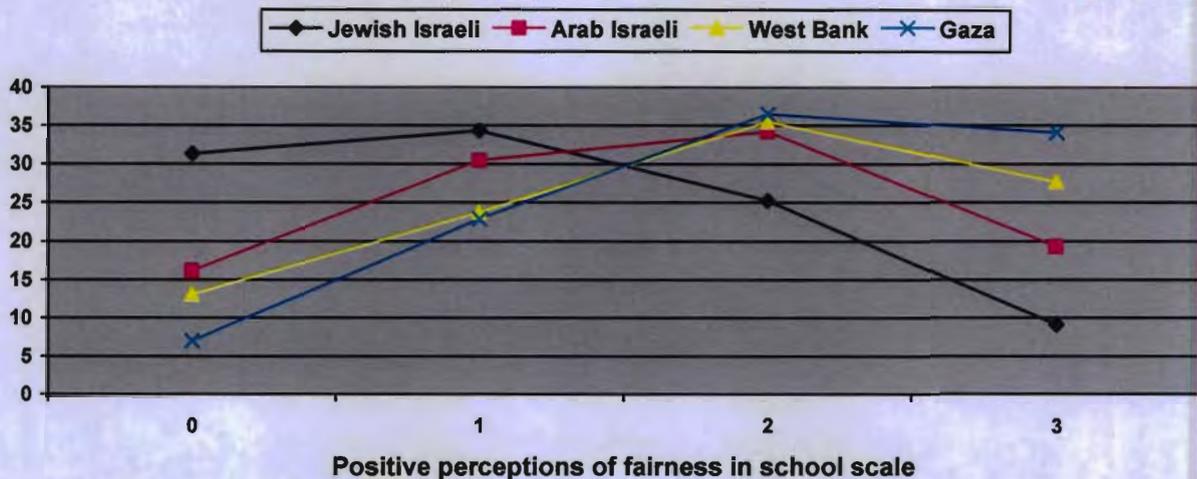
Example of composed summary scales:

Tables 2.7 to 2.9: Students’ perceptions of fairness in school scale

Comparing data in tables 2.7 to 2.9, the differences in the four populations regarding ‘students’ perception of fairness in school’ scale was constructed. This scale was formed using a One Way ANOVA analysis where each variable from tables 2.7-2.9 was coded into a binary variable in which 1 represents a positive perception and 0 represents a negative one. The scale therefore is the sum of the 3 binary variables, ranging from the values 0 (no positive perception) to 3 (three positive perceptions).

The analysis shows significant differences between the populations ($F(3,12282) = 407.701, p < 0.001$). In post hoc analysis (Scheffe), the researchers found that all 4 populations are significantly different from one another. The Gaza population has the highest average of positive perceptions, while the Jewish Israeli population has the lowest, and most negative, perception of fairness in school.

Population	N	Mean	SD
Jewish Israeli	2591	1.1216	.95754
Arab Israeli	2914	1.5669	.97646
West Bank	3644	1.7774	.99443
Gaza	3137	1.9751	.91718



Reliability: $\alpha = 0.460$

Researchers included a summary of data considering the different sections and analyzing any interrelationships between these broad categories. Statisticians built regression model analysis. For example, an odds ratio logistic regression model, predicting bullying others, 2 times a month, and students view of their treatment by their teachers in class using four variable views of students: 'teacher encourage student to express their views in class'; 'teacher treat them fairly'; 'teachers give them extra help if needed' and 'teacher is interested in them as a person' was built. Researchers noted in this regression model that with 0 positive perception the chances of a student bullying is 2 to 3 times ($p < 0.001$), higher than with those students having all four positive perceptions. In addition there is variation among the four populations within the same number of positive views. For example, in the Jewish Israeli population, even with one positive perception, there was no significant chance of bullying. Whereas, in the West Bank population even if 3 positive perceptions out of 4 were present there is a one-and half time greater chance of the student bullying others ($p < 0.01$). The researchers found many other likenesses and differences with the populations.

Example of regression table:

Results of logistic regressions model analysis: positive perceptions of parental involvement in school: (1) Parents ready to help if they face problems at school; (2) parents encourage them to do well in school and (3) parents willing to come to school to talk to teachers.

Odds Ratios of fitting logistic regression models predicting smoking cigarettes once a week or more, by population.

parental involvement School scale	Jewish Israeli		Arab Israeli		West Bank		Gaza	
	Odds Ratio	N	Odds Ratio	N	Odds Ratio	N	Odds Ratio	N
0 positive perceptions	6.776***	31	9.250***	70	3.555***	66	7.568***	82
1 positive perception	1.046	73	5.739***	181	2.271***	251	3.019***	250
2 positive perceptions	1.132	285	4.732***	339	1.409***	553	2.557***	621
3 positive perceptions	1.00	2,132	1.00	2,301	1.00	2,711	1.00	2,122

1) Results of logistic regressions model analysis: positive perceptions of parental involvement in school #

Odds Ratios of fitting logistic regression models predicting smoking cigarettes once a week or more, by population.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Parents ready to help in case of problem in school; parents willing to come to school and talk to their teachers; parents encourage students (them) to do well in school.

Increase in cigarette smoking as a habit could be associated to an increase in degree of stress anxiety or depression. It usually occurs as a reaction to an external event in ones life. The measure of this variable with the students' perception of parental relationship and school may be significant. This regression table represents an analysis of what is the increase in chances of the student smoking cigarettes once a week, as they (the students) have a decrease in positive perception of their parent's involvement with their affairs at school. In other words with three different positive perceptions that the student has about their parents involvement in their affairs, one assumes that a student smokes a certain number of cigarettes per week. We consider this as the 'unit' chance and calculate the number of times the unit repeats itself with two, one or no positive perception of the student about parental involvement with them in problems relating to their school.

(6) Impact Relevance and Technology Transfer:

During the annual HBSC conference in Lausanne Switzerland in November 2006 attended by this project's PI's, the assembly voted and accepted the Middle-East network as an official satellite project of the international HBSC. This has enabled our researchers to benefit from the vast knowledge of the international scientific community. The HBSC-ME is now a full and accepted partner in the cross-national effort to better the health of young people everywhere and both the Israeli and Palestinian teams are regular participants in HBSC conferences, meetings and workshops. All in all, the main measure of success is the establishment of an ongoing meaningful regional collaborative network of researchers and education and health professionals that is engaged in monitoring adolescent well being

and developing better and more efficient strategies to improve the lives of young people living in the Middle East. **The data now gained provide a national/regional profile of the health status of youth.** The publications that stem from the survey have served as a catalyst in setting the agenda for health promotion at both the national and regional levels. Over the past decade, HBSC has proven to be an effective means of supporting the cross-fertilization of experience among adolescent health experts, and to catalyze cross-national projects such as the European Network of Health Promoting Schools. (King, et al., 1996, Harel, et al, 1997)

Another important capacity gained through the project is the ability to conduct scientific surveys in Palestinian schools and successfully develop and monitor the whole process of the HBSC study. The sampled schools that participated in the project until today include hundreds of schools in Israel and the Palestinian populations distributed throughout the geographical region. Therefore, thousands of pupils, teachers and school principals have become directly involved in the HBSC project. Finally it is important to note that notwithstanding the context of the region; this project has achieved the development of scientific collaboration under the auspices, approval and cooperation of both Ministries of Education (Israel + PA) and the school systems. The information and findings provided by this project are used to develop policies and intervention programs and strategies to serve as catalyst in setting the agenda for health promotion. The results offer information relevant to health promotion by pointing out key public health issues, highlighting areas of concern and risk population and underlying notions of inequality in health by analyzing socioeconomic circumstances and developmental aspects.

All regional collaboration is being conducted in English, with mutual teams working on translation issues of questionnaires and reports between English, Hebrew and Arabic. Within each participating institute, many students are involved in the secondary data analysis of the regional datasets, opening numerous opportunities for future collaborations between faculty and students working on MA theses, doctoral dissertations and other types of specific research projects. This is the model by which HBSC is being carried out in Europe and North America, and this is the model that has been envisioned and developed in the Middle East.

Since the Palestinian Authority took control over the educational system in Gaza and the West Bank in 1994, much emphasis has been placed on enhancing the role of the school system in the lives of pupils and empowering schools to serve as a mediator between the students and their community - including the families. The regional HBSC project offers Palestinian policy makers a viable, scientifically-sound mechanism to investigate, monitor and evaluate the effects of schools on Palestinian youth. This is also true for the Israeli Arab and Jewish school systems. Working collaboratively has enhanced the

ability of all partners in the HBSC-ME to identify sub-populations at risk, and issues that have to be addressed in their respective populations so that they would be able to suggest effective policy and programs to the appropriate authorities. Especially in the Middle East, the stability and support that adolescents receive from health enhancing environments is critical for their social and emotional development. Furthermore, it is critical for the prevention of risk behaviors, daily youth violence and injuries that take such a toll on their safety and health.

(7) Project Activities/Outputs:

• **Joint activities:**

The Palestinian and Israeli research teams meet regularly to hold joint working meetings on a monthly basis – in addition to daily ongoing collaboration via phone and e-mail.

In addition to the regional joint meetings, usually held at the Al-Quds Campus in East Jerusalem and includes both senior and junior research team members, representatives of the HBSC-ME project have also attended many international scientific meetings – presenting findings and work in progress to fellow scientists and learn from the experience of others:

- June 2007 – Finland - The Spring WHO-HBSC Meeting
 - November 2006 – Lausanne Switzerland – The Fall WHO-HBSC Meeting
 - June 2006 – Budapest Hungary - The Spring WHO-HBSC Meeting
 - April 2006 – Trondheim Norway – Conference on Child and Adolescent Research
 - January 2006 – London England – Working Meeting at the London School of Hygiene the study of unintentional injuries among Palestinian and Israeli school-children
 - June 2005 – Amman Jordan – Workshop on Child health and Children rights in the MENA region
 - November 2005 – Torino Italy - The Fall WHO-HBSC Meeting
 - May 2004 – St. Petersburg Russia – The Spring WHO-HBSC Meeting
 - November 2004 - Athens Greece - The Fall WHO-HBSC Meeting
- And others.

Planned:

• **October 2008**

"Growing up in the Middle-East: The 1st Regional Workshop on Adolescent Well-Being and Health"

A regional conference concluding over a decade of joint scientific collaboration and outlining future challenges; participation is expected to include over 50 health educators and experts from; Israel, the

Palestinian Authority, Jordan, Egypt and hopefully other countries in the region, Europe and the U.S. (representatives from the HBSC and WHO).

(*) Publications and manuscripts:

Numerous manuscripts and publications have stemmed from this joint project.

Notwithstanding the final HBSC-ME report; "**Growing up in the Middle-East: the daily lives and well-being of Israeli and Palestinian youth**" relating to the 2004 survey findings which is awaiting dissemination; other publications are at various stages of productions, as listed below:

1. Al Sabbah. H, Vereecken . C, Kolsteren P, Abdeen. Z, Maes. L. Food Habits and Physical Activity Patterns among Palestinian Adolescents: Findings from the National Study of Palestinian school children (HBSC-WBG2004). Journal of Public Health Nutrition, 2007
2. Al Sabbah. H, Vereecken . C, Kolsteren P, Abdeen. Z, Maes. L. Characteristics of Overweight and Non-Overweight Adolescents, Satisfied and Unsatisfied with their Weights: Findings from the National Study of Palestinian School Children (HBSC-WBG2004).
3. Laufer, A, Harel, Y, and Molcho M., " Daring, substance use and involvement in violence among school children: Exploring a path model", The Journal of School Violence, pp 71-88, Vol 5(3) 2006
4. Harel Yossi, AbDeen, Z., Laufer, A., Karnawi, R., Amitai, G. " Psychosocial and Behavioral Outcomes of Subjective Threat from Armed Conflict Events (STACE): Findings from the Israeli-Palestinian Cross-Cultural HBSC Study", submitted to The International Journal on Prevention of Child Abuse and Negle, October 2007
5. Harel Yossi, Abdeen Z., Amity G. and Greenwald H. "Multiple Risk Behaviors and Suicidal Ideation and Behavior among Israeli and Palestinian Youth" Submitted to the Journal of Health and Social Behavior, 2007
6. Korn Liat and Harel Yossi, "Social and Behavioral Determinants of Nargila Smoking among Israeli Youth: Findings from the 2002 HBSC survey" Accepted for publication, Journal of Substance Use, 2007

Final stages of writing:

7. Harel Yossi, Abdeen Z., Amity G., et.,al. "Exposure to Armed Conflict and the Mental and Social Well-Being of Palestinian and Israeli Youth" To be submitted to Social Science and Medicine
8. Harel Yossi, Amity G., e.,al., "Truancy, poor school performance and Youth Violence among Israeli School Children" to be submitted to The Journal of School Violence

9. William Pickett, Yossi Harel et.,al., "A cross-national profile of bullying typology among young people in 35 countries" To be submitted to American Journal of Public Health
10. Abdeen Ziad, Harel Yossi, et., al., "Patterns of bullying among Palestinian school children", in clearance for submission to Journal of School Violence
11. Harel Yossi., et al, "New Approaches to the Promotion of Health and Well-Being among Youth: An Holistic-Community based model." To be submitted to The Journal of Health Promotion and Education
12. Korn, Liat, Harel, Y., Amiti G., Greenwald H., "Trends in tobacco use among Israeli school children 1994-2006" to be submitted to the European Journal of Epidemiology
13. Harel Yossi, Amiti Gavriel, et.al., "The social epidemiology of Youth Suicide Ideation and Behavior Among Jewish and Arab Israeli School Children"
14. Harel, Yossi., et., al., "Repeated Exposure to Bullying at School and Suicidal Ideation and Behavior Among Israeli and Palestinian Pupils", To be submitted to the Journal of Youth Violence
15. Harel, Yossi., et., al., "Clustering Effects of Suicidal Ideation and Behavior: Exploring the Contagiousness Hypothesis", to be submitted to the Journal of Adolescent Research

New manuscripts being composed:

16. Harel Yossi, et. al, "Negative school perceptions and involvement in bullying: A comparative analyses of school children in 36 countries"
17. Harel Yossi, et al, "The relationship between school perceptions, smoking and problem drinking among school children: An international perspective"
18. Harel Yossi, et. al., "School perceptions and psychosomatic symptoms: A universal relationship"
19. Abdeen Ziad, Harel Yossi, et., al., "The Social epidemiology and determinants of injuries among Palestinian school children in Gaza and the West Bank"
20. Shorok, D., Abdeen Z., Harel, Yossi., et., al., "Nutrition and eating habits of Palestinian mid-adolescent pupils"

(8) Project Productivity:

The project has indeed accomplished all of the proposed goals but of course the nature of this type of collaboration is continuous and on-going. The research teams and the partner institutions have proven their commitment and ability to sustain a meaningful and productive

collaborative network over time.

In addition to the fulfillment of all goals set out in the proposal, we also managed to secure funding for the continuation of the collaboration and are launching jointly on a process of application to several international funding agencies to secure additional funding so we could add more countries in the Middle East to this unique collaborative project.

(9) Future Work:

Health promotion will remain a priority for international and national policies and it involves various stakeholders. Sharing information on youth health-related behaviors, individual capacities and skills, and the social and economic determinants of those behaviors within the settings of children's daily lives, can provide highly useful information to support our efforts to reduce health-risk behavior. The long-range goal is for the regional HBSC to become an ongoing, multi-year project in which data will be collected simultaneously from representative samples of school children in the participating populations every 4 years. A core of the survey instrument will be repeated every survey implementation to provide monitoring of trends of the most important health related risk behaviors and health outcomes over time.

The HBSC-ME Palestinian and Israeli research teams have established an on-going collaboration and have created a supportive atmosphere with the respective ministries and schools systems as well as in the two respective universities. This supportive atmosphere is used to ensure the continuation of HBSC-ME as the main research and monitoring system to develop and evaluate policy and programs in the two respective countries. In addition, the HBSC-ME teams have been working on establishing an annual regional congress on adolescent well-being and health in the Middle East, to be launched in October 2008. This annual event will provide a mechanism, to share information and findings gathered by the HBSC and to evaluate efficacy and to learn from successes.

Currently, in addition to completing the list of planned publications and reports, we are involved in drafting applications for future funding.

The book entitled "*Growing up in Middle East: The Daily Lives of Israeli and Palestinian Youth*" summarizing all findings of the HBSC-ME project will be sent to you following publication later this year

(See cover sheet of the book and its table of contents attached)

GROWING UP IN THE MIDDLE EAST:

THE DAILY LIVES AND WELL-BEING OF ISRAELI AND PALESTINIAN YOUTH

Findings from the 2004
"Health Behaviors in School-Aged Children in the Middle East" (HBSC-ME)
A Regional Cross-Cultural Study

Yossi Harel & Ziad Abdeen

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