

Monitoring Indicators of Children's Victimization in School: Linking National-, Regional-, and Site-Level Indicators

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Abstract The paper presents a conceptual framework and methodology developed by the authors to create systematic empirical basis to monitor important social indicators. The focus here is on ways to employ indicators of victimization in school in order to inform a range of constituencies interested in the well being of school children. The paper outlines the importance of developing a wide range of indicators based on a theoretical model of social context of schools, as perceived from multiple perspectives (students, staff, parents, the general public). The importance of linking national-, regional-, and site-level indicators is emphasized and demonstrated. The paper presents examples of analyses and reports that can inform practice, policy making and evaluation in the area of school safety. Finally, monitoring indicators of victimization on all levels is described as a democratic youth empowering process.

Keywords School violence · Safety · Victimization · Monitoring · Indicators · Youth empowerment

Victimization of children in school is only a small fraction of the overall victimization of children. For instance, according to the US Indicators of School Crime and Safety (DeVoe et al. 2004), only 1% of homicides of school-aged children occur on school grounds. Nevertheless, the general public across the world perceives school safety as a major problem facing schools. International reviews show that school violence attracts major attention of policymakers and the public around the world (Akiba et al. 2002; Elliott et al. 1998; Ohsako 1997; Rose and Gallup 2000; Smith et al. 1999).

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World governments and local communities in different countries have created professional teams, community wide partnerships, and public committees to address children victimization in school. These coalitions tend to bring together community representatives, public officials, school and community social workers, psychologists, counselors, school principals and teachers, and relevant representatives of the academia. There is a growing trend by policy makers to base these efforts on relevant evidence, rather than on hunches and political power struggles.

One important way to inform these different constituencies is to employ social indicators. Land (1983) traces the origins of social indicators to the attempt of NASA to assess and evaluate the nature and magnitude of the impact of the space program on the American society. Since then, social indicators became an important element in national and international efforts to assess important aspects of the social domain in order to inform the public and policy makers. Since their inception, social indicators have evolved and changed in many ways reflecting changes in conceptual frameworks, methodology, and statistical tools (Land et al. 2001). Researchers and policy makers involved in creating social indicators and quality-of-life measurements have argued that well-measured and consistently collected social indicators provide a way to monitor the condition of groups in society, including the well being of children and youth (Land 2000).

The paper presents how our studies have used indicators of victimization in school in order to inform a range of constituencies interested in the well being of children. This work is based on a conceptual framework and methodology developed by the authors to create systematic empirical basis to monitor important social indicators. This framework and methodology have been presented in detail elsewhere (e.g., Astor and Benbenishty 2005; Astor et al. 2006a; Benbenishty et al. 2003). In the present paper we continue to develop this framework and integrate ideas from several fields, such as social indicators, public health approaches to prevention, evidence-based policy, and empirical practice. To illustrate the potential contributions of this approach we provide real life examples from our work in the area of children's victimization in schools.

1 Overall Framework: The Monitoring Cycle

Our work in this area is based on a conceptual and methodological framework of empirical practice and evidence-based policy (Benbenishty 1989, 1996, 1997). According to this approach, empirical practice is 'continuously informed and guided by empirical evidence that is systematically gathered and processed' (Benbenishty 1996, p. 78). The goal is to gather and process information in order to generate insights that are directly relevant for planning, decision-making, and evaluation in a specific context. The aim is to gain 'actionable knowledge' (Argrys and Schon 1996; Popper and Lipshitz 2000) and 'local generalizations' (Fishman 1999) that are relevant to practice and policy in a given location and may not generalize to other contexts. The driving force behind this approach is the desire to use information effectively to influence practice, rather than to evaluate treatment effectiveness.

In this approach, practitioners gather information systematically and repeatedly over time using instruments and methods shared by all practitioners in a particular system of practice. The information is then processed and aggregated to all relevant levels of practice—the individual client, the practitioner's caseload, the agency as a whole, higher

meaningful unites (e.g., the city, district, region), all the way up to the national level. Thus, information is being linked and used on all levels. Analyses include the description of clients, interventions, and outcomes and the identification of statistical relationships between clients' characteristics, interventions, and outcomes. Temporal analyses are utilized to identify changes over time in each client, in the agency as a whole and changes for the system as a whole (e.g., Benbenishty 1995, 1997). The results of these analyses are then fed back immediately in a series of reports to all relevant partners to this system- from the individual practitioner to the national level policy makers and the general public. Each of these reports is tailored to the information needs of the receiver and serves as a basis for decision-making, evaluation of the past and goal setting for the future. The monitoring cycle starts again, slightly modified to reflect insights gained in the previous round.

This approach was used to monitor practice in family service agencies in Israel and in child welfare agencies in Israel and in the United States (Benbenishty and Ben-Zaken-Zeira 1988; Benbenishty and Oyserman 1995). This framework has many implications for the ways social indicators could be used. In the following sections we will highlight some of these implications and will provide examples from our work in the area of children's victimization in schools. Specifically, we will highlight:

- a. Our work on national indicators of children's victimization.
- b. Employing indicators on the regional and school level.
- c. Empowering youth through indicators.

2 Indicators of Children's Victimization in Schools

Our team is monitoring children victimization in the school system in Israel since 1998. This national level monitoring was a response to growing concerns in the Israeli public and policy makers regarding school violence, coupled with a strong sense that valid information on school violence was lacking. This national level monitoring is conducted regularly every 2–3 years and, to date, we have conducted four waves of data collection. This is a large-scale national effort. In our last wave of data collection we surveyed more than 27,300 students from 526 schools, 1,861 of their homeroom teachers and 413 of the principals. We believe this work has implications for other nations, as well as for monitoring indicators in other areas of children well being. The following sections explicate some of the lessons learned from conducting large scale monitoring efforts.

2.1 Indicators Based on a Theoretical Model of Social Context

Our work in this area is greatly influenced by an ecological theoretical model (Benbenishty and Astor 2005). This model emphasizes the role of context in understanding school violence. Hence, the choice of indicators, of factors that may be associated with these factors and the methodology used to collect these social indicators reflect this theoretical framework. To illustrate, the model posits that the socio-economic context impacts victimization in school. Therefore, we gather information on the socio-economic characteristics of the students participating in our survey. It is then possible to identify how victimization levels vary according to differences in context and investigate what are the mechanisms, which connect between the characteristics of the socio-economic context and victimization in school.

Using a theoretical model to drive monitoring of victimization indicators has important advantages. A theory-based monitoring of social indicators becomes strongly associated with knowledge development. For instance, Chen (2003) uses the national survey on Taiwanese living conditions conducted by the Ministry of Interior, the Republic of China, in 1998 to revisit the disengagement theory and compares between the factors that predict life satisfaction achieved by three different age groups. Similarly, the school victimization indicator system that we employ is helpful in expanding scientific knowledge regarding factors that promote or hinder children's well being, as well as getting closer to understanding some of the mechanisms that mediate between context and victimization of children. Thus, for instance, the monitoring of key variables allows an examination of complex models that depict the interrelationships between issues such as peer risky behavior, teacher support, school policy, victimization and perceptions of safety and fear from attending school (Astor et al. 2006b; Benbenishty et al. 2002).

2.2 The Need for a Wide Range of Indicators

Studies which monitor school violence as one of a series of youth risk behaviors tend to use a very limited set of victimization indicators, mostly bullying (such as the YRBS, and HBSC e.g., Nansel et al. 2001). Others monitor severe types of violence, such as crimes and the use of weapons in school (e.g., National Crime Victimization Survey conducted by the US Department of Justice). In our national monitoring studies we include a wider range of reports of victimization, such as verbal, emotional, mild physical, severe physical victimization, weapon threats, sexual harassment, and property damage. This wide range of victimization types provides the public, policy makers and researchers a better understanding of the realities that children face in schools (see Vogel 2002 for a similar view in Sweden). Based on our prior work, we believe that in most countries the proportion of children whose well being is affected by mild forms of school violence is much larger than of children who are victims to the kind of extreme violent acts that attract the public's attention. Therefore, it is important to use indicators that are sensitive to these less severe forms of violence.

As with many other types of social indicators, indicators of victimization combine reports on actual instances of victimization, and children's reports on their subjective feelings, such as fear, safety, and teacher support. The combination of both objective and subjective aspects provides better insights to the lives of children in school. For instance, recent findings indicate that although the number of youth reporting victimization to violence in school did not change much over the last 5 years in Israel, there is a significant decrease in their sense of safety in school (Benbenishty et al. 2006). This is an alarming phenomenon which would have been missed had we not ask children about their subjective perceptions.

In our work we also broaden the scope of victimization indicators to include children victimization by staff. This aspect is usually ignored when children victimization is considered. In fact, our work has been the first to assess maltreatment of children by staff on a national level (Benbenishty et al. 2002; Benbenishty et al. 2002). By including indicators of physical, emotional and sexual victimization by staff this issue was brought to public and professional attention and promoted changes in policy. One of the most important results is a new set of policy guidelines issued by the Ministry of Education to address educational staff victimization of children.

2.3 Understanding How the Problem Affects Multiple Subgroups

Social indicators are more powerful when they can be broken down to relevant subgroups. The variability in each indicator across various groups may be quite large. Thus, it is important to plan the monitoring of social indicators that would be relevant to as many social subgroups as possible. In the Swedish system of social monitoring the findings regarding each indicator are broken down by 120 different subgroups! (Vogel 2002). In a recent wave of national monitoring of victimization indicators in Israel a stratified sample was used so that stable parameter estimates could be provided for 30 separate subgroups—Gender by School Level (primary, junior-high and high schools) by Cultural Group (Jewish Secular, Jewish Religious, Arabs, Druze, Bedouins).

These planned comparisons among groups enable a different status report for each group, identifying issues that are more relevant to each of the groups. Furthermore, monitoring each group over time provides an opportunity to identify how *changes over time differed for various subgroups*. Figure 1 presents changes over time in indicators of moderate victimization separately for Jewish and Arab groups. Moderate types of victimization include pushing and shoving, verbal threats, kicking and punching (see detailed operationalization of all indicators in Benbenishty and Astor 2005).

The figure clearly shows that the only reductions in moderate victimization occurred in Jewish schools whereas in Arab schools this indicator is quite stable.

2.4 Multiple Perspectives

We think it is essential to use indicators that are based on multiple perspectives, such as those of parents, teachers and school principals. Multiple perspectives are important for

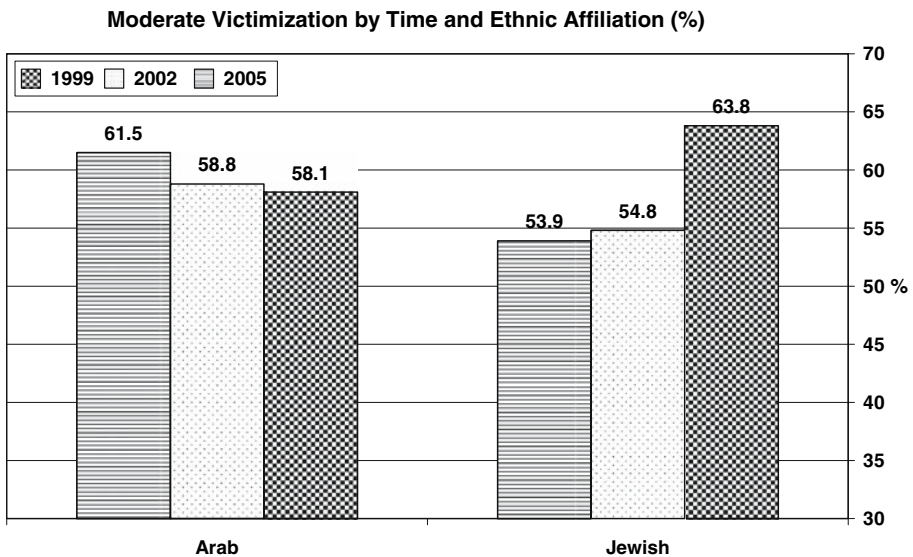


Fig. 1 Moderate victimization by time and ethnic affiliation (%). Note: The figure presents the percent of students who reported having been moderately victimized within the last month. The findings are presented for three points in time and separately for Arab and Jewish students. The N of Arab students ranged in the three studies between $N = 5,952$ and $N = 16,635$; Jewish students between $N = 10,368$ and $N = 10,681$

several reasons. Reports coming from several sources can be seen as providing a more comprehensive and balanced picture of the situation. Together, the views of multiple social and professional groups contribute to the understanding of the children’s experiences in school. Furthermore, the juxtaposition of these sometimes different perspectives may add to our understandings concerning the well being of children in schools. For instance, Benbenishty and Astor (2005) have shown that discrepancies in judgments about violence between teachers and principals may indicate that a school does not address violence in effective ways. Similarly, in our recent work we are asking both teachers and parents about their perceptions of victimization of children in school.

Multiple perspectives can be compared in two quite different ways. The first is a comparison between the aggregated views of each group. For instance, one can compare to what extent teachers, principals and students in national representative samples see their schools as having a serious violence problem. Such a comparison can provide important insights on their overall views and how similar they are. One can go a step further and ask whether the differences between these multiple perspectives are similar across various groups. For instance, a question could be raised whether the discrepancies between Jewish students and principals are larger than between Arab students and their principals. To illustrate, Fig. 2 presents the students, teachers and principals assessments of the severity of the violence problem in their schools. This information is presented separately for various groups in Israel.

Figure 2 suggests that children see the violence problems in their schools as more severe than do their homeroom teachers. Teachers see the problem as more severe than do the principals. Further, this pattern is much stronger among Arabs than among Jews. This tendency of Arab principals to see appreciably less violence in their school may be the

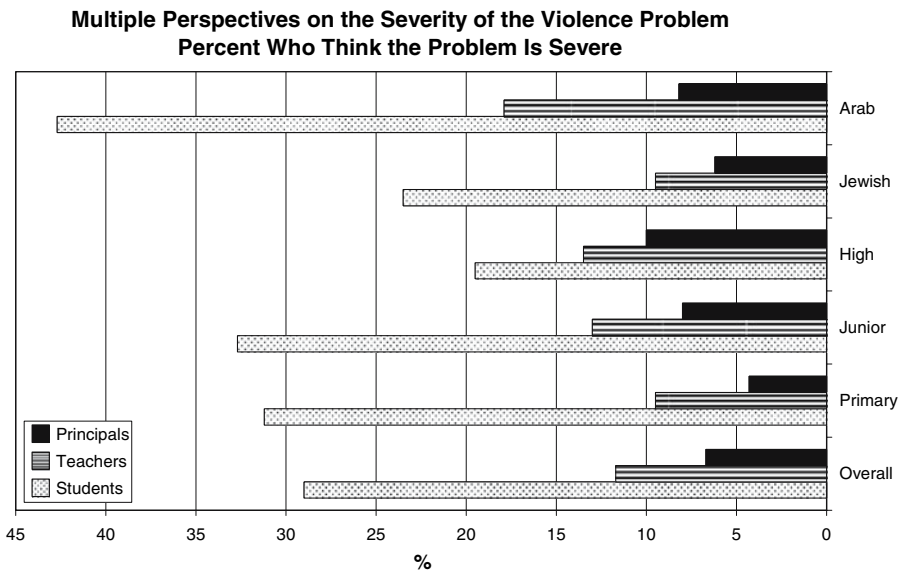


Fig. 2 Multiple perspectives on the severity of the violence problem percent who think the problem is severe. Note: This figure presents percent of those who assessed the school as having a violence problem. The findings are presented separately for different types of schools (Arab vs. Jewish, and primary vs. junior high and high schools) and by three types of respondents: students ($n = 27,316$), teachers (1,861) and principals (413)

result of several mechanisms. For instance, being members of a minority group, Arab principals may feel more defensive and prefer not to acknowledge the problem publicly. It could also reflect cultural differences between these groups in the Israeli society that experience different patterns of relationships between children and adults and between various levels of social hierarchy. Irrespective of the source of these differences, discrepancies between these multiple perspectives have important implications on efforts to address victimization of children in schools.

Multiple perspectives can also be informative from another vantage point. Instead of asking to what extent indicators assessed through teachers, principals and students are similar, one can ask—to what extent these various members of the school community *agree with regard to their own school*. Hence, for instance, whereas on national-level indicators the groups of teachers, principals, parents and children may have very similar perceptions regarding levels of victimization or school safety, there may be schools in which the gaps between these perceptions may be very large. Such schools or groups of schools that exhibit lack of consensus may be targeted for intervention.

From a methodological point of view we should comment that similarity and correspondence between multiple perspectives (i.e., the correlations between these perspectives) requires that multiple perspectives are measured *within* the relevant unit. That is, it is essential to gather information from students, teachers and principals from the same school. Comparing independent sample of students, teachers and principals would be useful in assessing overall differences in distribution, but will not allow the examination of correspondence among the multiple perspectives.

3 Linking National-, Regional-, and Site-Level Indicators

As is the case with many other indicators of children's well being, indicators of children's victimization are usually assessed on the national level. This is indeed an important role for social indicators: national monitoring of victimization provides educators and the public an accurate view regarding the problem of school violence. For example, national monitoring in Israel has shown that, contrary to the media hype and public image, levels of school violence have not risen in recent years and there were even some (modest) reductions in some indices. Similarly, in the United States, mass shootings on school grounds have created the public impression that school violence is on the increase. However, national monitoring of school crime and safety indicators (e.g., DeVoe et al. 2005) reveal that victimization to school violence has shown steady decline over the last decade.

It is important to note, however, that in many cases data generated at the national level are often not useful at the regional or at the site level. For instance, epidemiological work show that the nature and severity of drug and alcohol problems vary from state to state, but the interstate disparities in treatment services remain even after variations in treatment need have been discounted. This set of findings suggests strongly that national-level indicators in this area may not be very useful (McAuliffe and Dunn 2004). Similarly, so much variation in school violence can exist across schools in any given country, state, or school region that national data may not reflect the situation at any specific site. Thus, schools that wish to know their levels of victimization and whether victimization levels in their site have been lower than in previous years, may find national-level indicators of little use. Further, local school systems which invested special efforts and resources to combat school violence and to improve their children's safety are unable to use national longitudinal reports to ascertain whether there were any positive changes in their own locality.

Hence, they cannot evaluate the extent to which their program made positive changes in levels of victimization among children in their region. In response, the national monitoring model was expanded to the region and school site level (Benbenishty et al. 2003).

In our approach, each school in a region conducts a thorough assessment of school violence and school climate. All schools in the region use the same instruments and method so that all of the information is aggregated on the region level. This process is repeated on a yearly basis. The information is analyzed and feedback is provided to all participants. Each school site gets a thorough assessment of violence in the school. This information empowers the school leadership to plan interventions for the school on the basis of a valid and reliable assessment of the site. On the region level, a comprehensive and detailed picture of the region emerges. It describes both the region as a whole and the relative situation of each school site within the region. Hence, the region leadership is empowered to make policy decisions and choices regarding what programs to adopt for the region as a whole and for particular schools on the basis of comprehensive and comparable data.

3.1 Gathering Relevant Unit-Level Data

In order to link information on all levels, the same instruments are used throughout the system. This provides the basis for aggregation and comparisons. Hence, the same instruments developed for the national monitoring of victimization in schools are used by schools and school districts. It is important to note, however, that as one moves from one level to the next one may add information, which is relevant to a specific unit and eliminate information, which may be less relevant for that unit. For instance, information on dangerous locations in school is relevant on the school level and much less so when aggregated to a city-level. Whereas a particular school community may need to know that the area behind the physics lab is considered dangerous by their students (cf. Astor et al. 1999), it might be meaningless when aggregated across many other schools with different topographical layouts.

In addition to eliminating information which may not be relevant to higher level units, it is also important to add information which becomes relevant in these higher level units. For instance, when the information from students, teachers and principal is aggregated to form a school unit there is a need to add information that is relevant to the school as a whole, such as size and teacher turnover rate, characteristics of the location (e.g., mean level of education in the neighborhood, unemployment rate), and of the school cultural affiliation (e.g., ethnicity, religiosity). As school units are aggregated to a city-wide level more information pertaining to the city as a whole is added to the data base. This approach provides the means to disentangle the independent contribution of factors which are associated with each level. For instance, the question could be asked to what extent victimization is associated with the characteristics of the region, the neighborhood, the school, the class or even with the certain characteristics of the victim.

3.2 Analysis

The value of this approach for practitioners and policy makers comes mainly from two levels of information processing involved: description and comparison. The *description* of the frequency of certain indicators can be most instructive for planning interventions,

training and allocation of resources. Consider, for instance, a finding that almost half of the students in secondary schools describe teachers' response to complaints about being bullied as 'ignoring the complaint', another third portrays the response as 'blaming the victim,' and the rest describe a variety of caring and effective responses. This descriptive information on the distribution of the various responses has direct implications for training of school staff so that they do not ignore complaints of students and find ways to respond emphatically to victimized students, rather than blame them.

Although, as in the example above, descriptive information may be informative in and of itself, there is often a need to put this information in perspective. As an example, consider a school principal who is informed that 15% of the students report that they are afraid of bullying in school. This is definitely worrisome, as no student should fear in school. Still, if the figure was 25% last year or is 40% in a neighboring school, the interpretation of this descriptive information may be quite different. Thus, the role of the *comparisons* we conduct in our analyses is to put information in context. They help determine whether the value of a certain indicator is higher or lower than the value of another indicator. There are many types of comparisons that are used in a system that monitors indicators of victimization linking units on several levels. Elsewhere we provide details on the many relevant and informative comparisons that we use in our work (Benbenishty et al. 2003). Table 1 summarizes the various types of comparisons.

3.3 Processing and Analysis: Technology as a Solution to Data Temporal Relevance

Using social indicators on many levels has important implications for the ways data are being processed and reports are generated. No doubt, all social indicator systems can benefit from quick processing of the data and a rich set of reports designed for a wide range of potential users. These qualities, however, are practically critical for an indicator system that is distributed on several levels, such as the one we developed. A system designed to utilize indicators on a 'low-level' unit, such as a school, needs to have a shorter turnaround time than a national system. Furthermore, given that students, teachers, parents and principals may not have the skills that high level professionals and policy makers have, the reports should be tailored to fit the needs and skills of users on all levels.

Moreover, when the need to process information and produce reports separately for each unit on each level of analysis is considered, it becomes clear that the task is formidable. The combination of extensive questionnaires, thousands of respondents, and many schools

Table 1 Comparisons of indicators of victimization to school violence

I. Within-School Comparisons
Ia. Across areas of victimization (e.g. physical vs. emotional)
Ib. Across groups of students, teachers, parents (e.g., by gender and grade level)
II. Between-Schools Comparisons
IIa. Comparing schools within a region
IIb. Comparing the region with national-level data
III. Temporal Comparisons
IIIa. Identifying changes over time
IIIb. Comparing magnitude and nature of change across areas of victimization
IIIc. Comparing magnitude and nature of change across schools

in each city creates a complex data set. Furthermore, most users of these data (school personnel, principals, and superintendents) are not familiar with data analysis. On one hand, they are eager to gain as much as possible from all the information gathered; on the other hand, they would prefer to get a clear and concise summary encapsulating all of the important points in a manner which is easy for them to grasp.

Fortunately, today's technology provides effective means to address these challenges of data gathering, processing, analysis and multiple report generation. For instance, we combined automatic data processing and report generation with more traditional statistical analyses and research reports. For purposes of expediting immediate reporting, the questionnaires were designed so that they could be scanned and read automatically. We developed software to decode the raw data received from the scanning program and to produce automatically and immediately a series of charts and text reports. With this automated processing, it was possible to scan about 10,000 questionnaires and provide reports to all schools in the region (about 25) within less than 2 weeks, employing only one assistant. The immediacy of the data processing and report generation communicates to all involved that the information is being used to support their ongoing work rather than to prepare research reports.

3.4 Reports on Indicators of Victimization

In order to make an indicator system useful for policy making on all levels, reports should be generated to respond to the various information needs of all constituencies. Research reports are generated for policy makers on the city and national level. These reports present the distribution of the various indicators in the population as a whole and for a series of subpopulation defined in advance (e.g., by gender, age, religious affiliation). These reports further provide more in-depth analyses that explore the factors that are associated with and contribute to these indicators. Figure 3 presents the findings of one of a series of hierarchical regression analyses performed for each of the indicators on the national level in order to identify factors that can explain variance in the indicator. We used this type of analysis because it allows us to ask how each group of background variables is associated with the indicators, after other relevant background variables were already (statistically) controlled. Explaining ('predictive') variables are entered hierarchically such that the factors that clearly are not in the school's control are entered first. We then ask- given that the school is situated within this context, are there factors, which are within the school's control that can add to our understanding and explain variations in levels of staff maltreatment? (i.e., do they make an independent contribution to explained variance?). Hence, variables such as school policy against violence, staff support of students, and level of students' participation in decision making are entered after all other independent variables, such as the socio-demographic characteristics of the students' families.

This figure presents to the policy makers in the Ministry of Education which factors explain variance in each type of staff maltreatment. The chart identifies children groups that are more vulnerable than others. The simple distribution of the indicators among the various subgroups clearly showed that Arab students report more physical and sexual maltreatment by their staff than any other group of students. However, the more sophisticated hierarchical regression analysis presented in Fig. 3 also reveals that when poverty is taken into account, the level of staff physical maltreatment of students is not associated with ethnicity at all. This helps to shift attention from cultural issues to more focus on poverty and resource disadvantages among Arab schools in Israel. In contrast, sexual

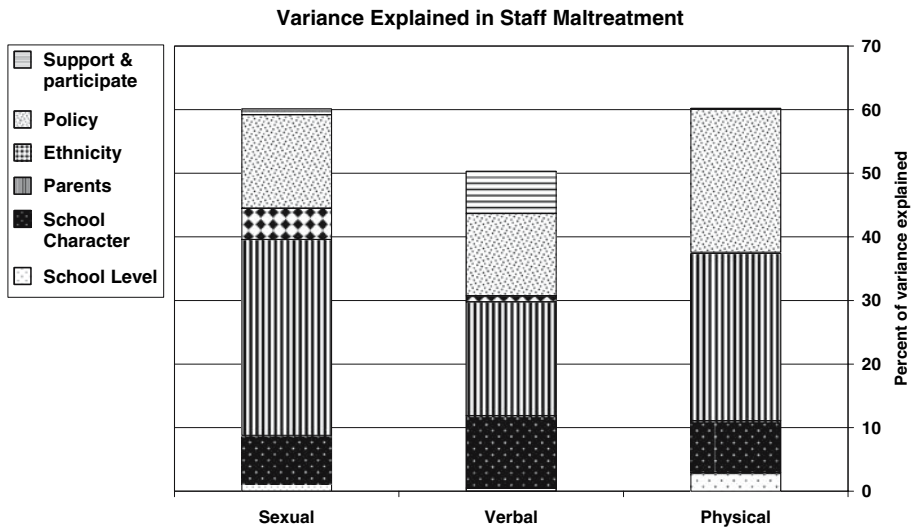


Fig. 3 Variance explained in staff maltreatment. Note: The figure presents the variance explained by each of the explaining variables (predictors) in hierarchical regressions computed for each of the three types of victimization perpetrated by staff against children (Sexual, Verbal and Physical). Variables were entered in groups, in order to assess the independent contribution to explained variance of each group. Variables which are more under the control of the school (i.e., policy against violence, staff support of students and students' participation in decision making) are entered last. $N = 27,316$

maltreatment is associated with ethnicity, even after poverty is taken into account. This may require a focused discussion among policy makers and educators as to the sources of students' perceptions and staff behaviors regarding sexual aspects of their relationships.

On a city level, an important report is a city-wide comparison of indicators of victimization among the schools in the city. Figure 4 shows one of the charts that could be provided to the policy makers on the city level (in our work we did not use this figure because we promised not to reveal to the city authorities the school-level findings). It presents the percent of students reporting victimization to severe violent acts within the last month in each of the primary schools in the city.

This chart shows the wide variability among schools in the city with regard to this indicator. It shows for instance, that the city-wide mean is 14%, and in school 'J' the frequency is almost 24%, whereas in school 'I' it is about 9% and school K it is 3%. This information is useful to guide resource allocation based on the valid indicator of severe victimization.

Continuous monitoring of indicators on a school level can provide important feedback for school staff on the issues that they face and the changes over time. Figure 5 presents our real life findings for school 'B' on the indicator of how dangerous are various locations in the school in three consecutive years.

The figure shows that in the first year of the project the most frequently mentioned location was the yard (almost 16% of the students felt it was dangerous) and the gate at the end of the day was also considered dangerous by almost 12% of the students. The figure shows that there were significant, and in most cases consistent, reductions in levels of perceived danger of these locations in school. The most impressive progress in this school was made with regard to the yard. Hence, school officials who have responded to the report

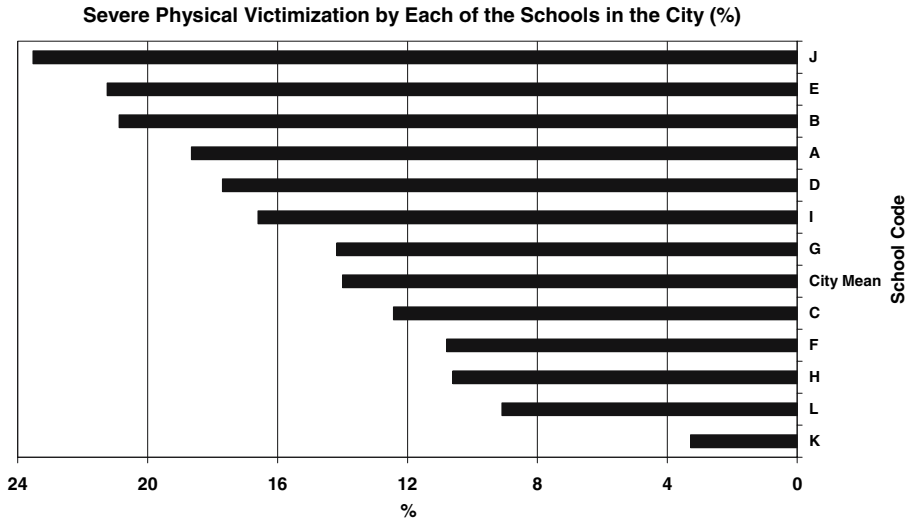


Fig. 4 Severe physical victimization by each of the schools in the city (%). Note: The figure presents a list of all the schools in a city (each identified by a code), sorted by the percent of students who reported in each school that they were severely victimized. $N = 4,878$

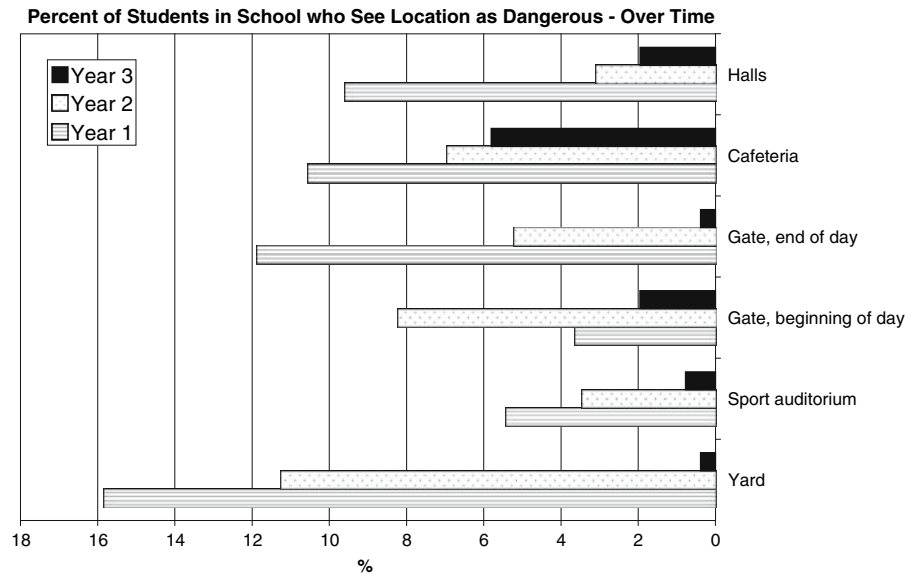


Fig. 5 Percent of students in school who see location as dangerous-over time. Note: This figure presents data from three consecutive years in a school that asked students to indicate to what extent they feel that these locations in school are dangerous for them. N of students in Year 1 = 526; Year 2 = 501; Year 3 = 575

in the first year and responded in tightening supervision in the yard and maintaining an ‘end of the day shift’ near the gate, received strong indications that their efforts were quite fruitful. This kind of interpretation raises the question whether this methodology can be useful for evaluation of interventions and policy changes on all levels.

3.5 The Value for Evaluation

We suggest that the methodology described here provides an empirical basis for the evaluation of interventions. Because data are collected over time, a longitudinal view of target behaviors is created. Thus, comparisons of victimization levels over time may show that the frequency of certain behaviors dropped significantly after new interventions were introduced. Furthermore, when interventions are designed to address specific violent behaviors and not others, the design can be seen as a ‘multiple base line across behaviors’ in which changes in levels of ‘targeted’ behaviors are compared to changes in other behaviors not addressed by the intervention (Bloom et al. 1995).

To illustrate the potential benefits of this approach for intervention planning and evaluation, let us consider a hypothetical example. Based on the region-level aggregated report, the head of the education department in the city may conclude that sexual harassment levels in the municipal educational system are much higher than the national norm and that there are many indications that female students who are victims of sexual harassment experience severe emotional pain. Further, the analysis of the indicators suggests that two distinct types of victimization can be identified—sexual harassment with an intent to humiliate (e.g., spreading sexual rumors) and harassment with intent for sexual contact (e.g., trying to kiss a student). Based on this empirical data, the city educational board may then decide to target the issue of sexual harassment with intent for sexual contact. City-level personnel may then design a series of interventions to heighten awareness of this issue and to respond firmly and uniformly to all incidents involving such unacceptable behaviors.

This city-level policy and interventions need not (and indeed, should not) be ‘one size fits all.’ Because each school has its own data on harassment and within each school the data are broken down by grade and gender, interventions may be tailored to fit the special circumstances in each school. For instance, in certain schools the problem may be apparent in higher grades of high school whereas in others in lower grades. Furthermore, certain schools may not have this problem at all. The comparisons of indicators of sexual harassment across schools within the city can help policy makers allocate resources in ways that focus on schools that need them most.

As monitoring continues, comparisons of sexual harassment overtime can indicate changes before and after the new policy and educational programs were implemented. These ‘pre-post’ comparisons are made on both a city-wide level and on within each of the city schools. A drop in victimization levels could then support the case for the effectiveness of interventions. The magnitude and nature of change among the schools in the city should be compared as well. For instance, a comparison between junior high schools in which no intervention was implemented, and therefore can serve as a comparison group and high schools which were targeted for change can help discern whether the change is a likely outcome of the intervention, or perhaps of some other factors (such as a regression to the mean or historical changes in the nation/city as a whole).

Furthermore, using this ‘multiple base line’ framework, changes in the target behaviors (i.e., sexual harassment with intent for sexual contact) could be compared with changes in other sexual harassment behaviors (e.g., with an intent to humiliate). Such comparisons can help indicate whether changes can be attributed to the interventions in question, which directly focused on one type of behaviors but not others.

It should be noted that we do not claim that this is a strong design for evaluation of the effectiveness of social interventions. One might expect that the development of large scale interventions would utilize more powerful experimental designs. Nevertheless, we think

that this approach provides a more solid based for evidence-based policy in this area than other methods that are not based on monitoring social indicators.

4 Monitoring Indicators of Victimization as a Democratic Youth Empowering Process

Vogel (2002) argues that ‘...social reporting plays an important role in a representative democracy, by providing the electorate with comprehensive information on social conditions’. He goes further to assert that by bringing the representative picture to the public forum, social indicators initiate the important process of asking ‘what is to be done’ and formulating course of action decided by the appropriate political institutions. Clearly, social indicators of victimization of children by their peers and educational staff serve this democratic function. We think, however, that an indicator system linking national, regional and school level indicators based to a large extent on children’s voices, has additional important contributions to democracy and empowerment.

Ben-Arieh (2000, 2005) proposes that children have a role in measuring and monitoring their well being. Among the roles that he proposes are their involvement in the design of the indicators, in reporting on their well being and in being part of the policy making process emanating from this process of monitoring their well being. We strongly agree with this view. Furthermore, we argue that as indicators, based to a large extent on children’s voices, spread from national level to ‘lower’ levels, such as regional and school site, the importance of this process to democracy and youth empowerment grows exponentially (Astor and Benbenishty 2005; Astor et al. 2004; Astor et al. 2006).

We use the word “Democracy” to describe a philosophy that promotes the right and the capacity of each individual or group in the school to give voice about indicators that affect their lives. When all students in school are surveyed about their victimization, feelings about the school and how they perceive the ways staff respond to their situation, we give students a voice. These voices should be considered as the cornerstone for discussions, interventions, and procedures enacted by the school. A democratic approach strives to encourage schools to adopt the core principles of representativeness and inclusive participation. Often times, in an effort to conform to state and national regulations, school districts impose restrictive policies on students and staff that are neither based on the schools data nor tailored to the needs of the school community. This could create a population of students, teachers and parents who feel powerless about the future of their own school.

Ironically, although schools are attempting to educate students to be democratic citizens, they rarely enact any of the democratic structures, processes and mechanisms that are the cornerstones of a democratic experience. What we propose and attempt to implement in our work is to involve the students in the design of indicators, interpretation of the findings, and the formulation of policy and intervention initiatives. This process brings the many voices of the students to help impact their lives in school. This is an empowering process for youth. It brings them to the center of the school’s policy making process and allows them to influence it.

This empowering process is not limited to the school site. Representatives of youth on the city- and national level may also have an important role in making sense and explaining the voices of youth. Youth can be the best interpreters of data provided by their peers. Youth representatives, with appropriate training, resources and ongoing mentoring, should

be empowered to understand the findings of the victimization indicators, to ask new questions and to glean youth relevant lessons from this rich database. With these insights, youth representatives will form their opinions, ideas and policy recommendations.

Social indicators reported on the national or regional levels may not have personal meaning to individual youth or to particular schools. However, social indicators of victimization that directly pertain to their schools, peer groups, and community are likely to have greater degrees of personal meaning to students in those settings. Hence, linking national, regional *and* local data has the potential of involving large numbers of students across each country. It will provide youth a context through which they can interpret national and regional data that may seem distal without a personal reference point at the local level. We believe that this process holds the kernels of democracy and empowerment, since for the first time in many countries, youth would be able to see information about their locale and have direct input to impact the solutions for the problems facing their generation.

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