Assessing adolescent mental health in war-affected societies: the significance of symptoms

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Abstract

Objective: To compare the use of self-report symptom checklists with qualitative methods for assessing adolescent psychological well-being in a war-affected society.

Method: A school-based sample of three hundred and thirty seven 13- to 15-year-olds from two communities on opposite sides of the Bosnian conflict (183 from Gorazde, 154 from Foca) completed the Hopkins Symptoms Checklist and the Harvard Trauma Questionnaire. A gender balanced sub-sample of 40 adolescents was selected on the basis of their combined checklist scores, including equal numbers of high and low scorers from each side. Over the following 6 months this sub-sample was assessed (blind to checklist scores) with qualitative methods that included narrative interviews of child and parent, and participant observation. School marks were taken as a measure of social function.

Results: Qualitative: Some children identified as “less well” by qualitative methods denied having symptoms. Some children identified as “well” had symptoms with no pathological significance for them. The lifeline revealed that feeling “less well” could be more related to post-war circumstances than war events. Quantitative: The two symptom checklist items have shown good internal consistency and discriminant validity. However, comparison with the overall well being revealed that still in 9/40 of cases the reported presence or absence of symptoms did not correspond to the well being of the child. Items of the two questionnaires did not discriminate reliably between children identified as “well” and “less well” by other means.

Conclusions: Self-report checklists may be useful as a public health measure to assess the prevalence of psychological distress in war affected areas, but they are not an adequate means of clinical screening.

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Checklists used in combination with other qualitative approaches make it possible to identify those in need and avoid unnecessary pathologizing.
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Introduction

Courtesy of the global news networks, the crying child and agonized mother are no longer confined to their devastated homelands, but have entered our living rooms, turning all of us into witnesses to their pain and suffering. Five months after air strikes in Kosovo, there were at least ten agencies running psychiatric and psychological support services for children, with 17 projects in the Prishtina municipality alone (UNICEF, 1999). Many such programs use self-report symptom checklists as a way of identifying those in need, but how significant are symptoms? Research evidence from conflict areas around the world shows that between 50 and 80% of children do not have many psychological symptoms (Cairns & Dawes, 1996, p. 130; Saigh, Green, & Korol, 1996). So what is the best method of identifying those in need? This paper compares the usefulness of a symptom-based approach, with qualitative methods such as narrative, lifelines, and participant observation, when assessing the psychological well-being of children in a war-affected society.

There are obvious advantages to self-report symptom checklists, especially when working with limited resources in difficult and insecure conditions. They appear to be simple and quick to administer, and easy to understand and interpret. Non-medical personnel can quickly be trained to use them.

However, there are a number of problems. Firstly, many checklists are focused on a single diagnosis: Post-Traumatic Stress Disorder (PTSD) (DeJong, Mulhern, Ford, Van der Kam, & Kleber, 2000; Kuterovac, Dyregrov, & Stuvland, 1994; Thabet & Vostanis, 1999; UNICEF, 1996). The assumption being that after exposure to a traumatic event, this will be the most common problem. Yet mental distress may manifest itself in a wide variety of ways in war-affected areas. Secondly, even when used in research conditions in a Western hospital, the scales lack specificity and sensitivity. A self-assessment screening battery recommended by Yule and Udwin (1991), which consists of the Impact of Events scale (IES), Beck Depression Inventory (BDI) and Revised Children’s Manifest Anxiety scale (RCMA), was used to screen children for PTSD in an accident and emergency department following everyday trauma. It failed to identify 14% of those with PTSD, as identified by clinical interview. Arbitrary cutoff scores may have meant that some children with slightly less “symptoms” but significant distress were missed (Stallard, Velleman, & Baldwin, 1999). Cutoff scores will vary depending on the population under study (Joseph, Williams, & Yule, 1991). Most of the commonly used scales have not been properly validated for the countries and conflict situations in which they are used (AACAP, 1998; Richman, 1993). Sack looked at the psychometric properties of the IES in a sample of Cambodian youth. He found that of those who screened positive, only 30% were true cases, and of those who screened negative 89% were non-cases (Sack, Seeley, Him, & Clarke, 1998). While this may not matter so much when using the scale for
epidemiological research, it does become significant when the purpose is to identify individuals for treatment.

High levels of symptoms do not necessarily equal psychiatric disability. They may reflect a norm for that population, or a temporary adjustment to the stresses of war (Westermeyer, 2000). Goldstein looked for war related distress symptoms in a sample of 364 displaced children in Bosnia and found that 94% of the children met DSM IV criteria for PTSD. As there was shelling of the city on 35 days in the 2-month period of data collection, he suggested that many of the symptoms were adaptive in that context (Goldstein, Wampler, & Wise, 1997).

On the other hand the absence of symptoms is not necessarily an indication of psychological well being. Avoidant symptoms are by definition hard to measure (Cassidy & Kobak, 1988; Green, 1991) and are best assessed by observing the child. Paradoxically some suggest that higher symptom reports in the aftermath of trauma might indicate better psychological health in the form of openness, self-awareness, trust and processing (Davies & Flannery, 1998). Eisenbruch has shown that the absence of sadness and apparently successful assimilation into a host country may not indicate good health in child Cambodian refugees. Just as the continuing presence of “nostalgia” may be a crucial component of sustaining identity and continuity in a new environment, rather than a symptom of pathological grief (Eisenbruch, 1990).

There is an increasing amount of research showing that it is the way that individuals interpret their experience, and the context in which it occurs, that influences whether or not psychological symptoms are perceived as distressing (Kleinman, 1987). Hume and Summerfield (1994) studying ex-combatants in Nicaragua found poor sleep, noise intolerance, nightmares, hypersensitivity and somatic complaints in the majority, but it was only those unable to maintain social functioning who regarded these symptoms as problematic.

A focus on quantifiable variables such as the presence or absence of psychopathological symptoms means that the young person’s subjective understanding, which is rooted in their life history and social world, cannot be fully explored. So the meaning of a particular symptom to that person, in that cultural context, cannot be understood. War is a collective experience and the primary impact on individuals is through witnessing the destruction of their social worlds embodying their history, identity and living values (Summerfield, 1999). Changes in trust, world view, moral outlook, sense of security, and sense of connection to others may have a profound impact on well-being but not manifest themselves as “symptoms” that can be counted, but rather as “ways of living” that must be observed and discussed.

There have been frequent calls for more qualitative and ethnographic work to address these issues (Cairns, 1994; Cairns & Dawes, 1996; Jensen & Shaw, 1993; Kleinman, 1987; Richman, 1993). Yet there are relatively few studies of war affected children that combine qualitative and quantitative work (Farwell, 1999; Miller, 1996; Weine et al., 1995).

The primary researcher has been engaged in an ethnographic study of Bosnian adolescents’ understandings of war in two towns on opposite sides of the conflict. Self-report symptom checklists were given to young people, and their subjective world view was explored through in-depth interviewing and participant observation. This provided an opportunity to compare the usefulness of symptom checklists with other qualitative means of assessing psychological well being.
Background to the study

The war in Bosnia Herzegovina began in 1992. Overall the war displaced approximately one million people. Around 250,000 are thought to have died, the majority of them civilians. The study was conducted in the two neighboring towns of Foca and Gorazde in Eastern Bosnia. Prewar both towns had ethnically mixed communities with good relations. The war began in Foca in April 1992. The non-Serb population was forced to flee the town. Those who did not were subject to many abuses (Human Rights Watch, 1998). In September 1995 NATO air strikes destroyed the town's bridges but caused no civilian casualties. Most Serb Foca children in the study had been sent out of town prior to the onset of fighting in April 1992, but were present during air strikes. Today the local authorities continue to oppose the return of non-Serbs and some indicted war criminals remain publicly active in the town. Because of its noncompliance with the terms of the Dayton Peace Agreement, there has been little input of international aid.

Gorazde was under siege from Bosnian Serb forces for almost 4 years and suffered repeated periods of intense shelling and sniper fire. Most of the Gorazde children in the study lived in the town throughout the siege. Post war unemployment is high but there has been a good input of international aid into the community allowing the rebuilding of homes, schools, and sports Centre, and restarting cultural life. Gorazde declared itself an open city in November 1997 encouraging Serbs to return and a slow trickle of families have begun to do so.

Methods

The project was approved by the Cambridge University Psychology Research Ethics Committee.

Self-report check lists

The full sample of 337 children completed the Hopkins Symptoms Checklist (HSCL-25), which is composed of 10 questions on anxiety, and 15 items on depression; and the 16 question trauma symptom component of the Harvard Trauma Questionnaire (HTQ) (Mollica et al., 1991a, 1991b). These scales were chosen because the range of symptoms matched the primary researcher’s clinical experience working as a psychiatrist in Gorazde in the 6 months preceding the study. They had already been translated and back translated for a Bosnian population, and had also been shown to be meaningful to a population exposed to long-term mass political violence in Indochina (Mollica et al., 1992). After piloting the questionnaire with 100 children, the question relating to loss of sexual interest or pleasure was eliminated.

Selecting the main sample. Headmasters in both communities agreed to the study and allocated classes of 7th, 8th primary and 1st grade high school on the basis of timetable convenience. One hundred and eighty three adolescents between 13 and 15 in Gorazde, and 154 adolescents of the same age in Foca (337 children in total) completed the questionnaires (Table 1). All the children were physically well and apart from one girl, had not been in any psychological
support program. All the children participated anonymously and any that wished could abstain. None did. One child’s questionnaire was discarded as unusable.

**Administering the questionnaire.** The children were not familiar with questionnaires and initially suspicious of anything connected with psychology. The teachers felt that the children would only answer honestly if they filled in the checklists alone and anonymously. The process was as follows: in each town the primary researcher was accompanied by a skilled young translator from that community, who was familiar with all aspects of the project. An introductory talk was given which explained that the researcher was working in school rather than a clinic because she wished to know the kinds of symptoms normal child experienced in response to war, that having symptoms did not mean one was “crazy,” and that different people had different symptoms at different times. The metaphor of taking everyone’s blood pressure in a population to establish a normal range was used. Hypertension is common in Bosnia and this made sense. They were then taken through the questionnaires as a group. Each question was fully explained and they were encouraged to ask about any question that caused a problem. The researcher then went round checking to see if there were individual problems, as they filled them in. The whole process took 1 hour.

### Story writing

In a second class period all the children were asked to write stories entitled “What War Means to Me and How It Has Affected My Life.” Three children in Foca opted out and drew pictures instead.

### Selecting the sub-sample

Based on the combined symptom scores from the two rating scales, a gender-matched sub-sample of 12 was selected from each primary school, by including the six boys and six girls with highest and lowest symptom scores. A similar gender matched sample of eight was obtained from each high school. Each selected child and their parents were sent an explanatory letter and invitation. The school pedagogues in each school assisted with the selection to enable the researcher to remain blind to the child’s symptom score until the end of the study. Once the whole sub-sample was collected, a meeting with each family was arranged to go over the study procedures and answer any questions. If a child did not wish to participate, the child of the appropriate gender in that school with the next score up or down was invited. In all
there were 47 refusals, 39 of whom were low scorers, and the majority of whom were boys (29), in both cities. The children who refused to participate were somewhat less symptomatic than the group finally selected but this was not a significant difference \[ t_{1,44} = 2.8, \text{ ns} \]. The sample finally consisted of 20 high and 20 low scorers (40 in total). Both the high and the low scorers of the final sub-sample fell within the highest and lowest quartiles of the main sample distribution.

*Interviews with parents*

Interviews were conducted with two thirds of the parents in the family home. Both parents were interviewed (except in single parent families) without their child present. Because of the importance of offering hospitality in this culture, the “interviews” were part of conversations over two or three visits with each family. Questions were asked about their child’s early health and behavior, previous and current living conditions, key events during the war including losses, their perceptions of the impact of war on the child’s well-being, and their own health. Initially a modified version of the Child Behavior Checklist (CBCL) was used (Miller, 1996). It was not found to be a useful tool in this culture, as all the parents uniformly gave their children low scores that were contradicted by the narrative discussion in the same interview, so it was discarded. The interviews rapidly immersed the primary researcher in both the child’s domestic situation and the collective experiences and culture of the communities. This built up trust and made it easier to establish rapport with the child.

*Interviews with child*

Each child was interviewed twice for approximately 2 hours on each occasion. Interviews in the two towns were carried out in parallel so that all first interviews with the children were completed before the second ones were begun. In all cases the topics covered included biographical information, life history, war experiences of self and family and their understanding of these; current life situation, personal ambitions, view of the future and subjective perceptions of well being. The child was asked to describe in their own way life before, during and after the war, concentrating on whatever was important for them. This gave the respondent the chance to show what they saw as key events, and how they saw the war in the context of their whole lives. It also provided an indication of coping strategies: for example the degree of avoidance, and a map for further questioning. Narrative style was noted. Some children talked spontaneously for over an hour, some asked the researcher to give them structure through concrete questions. If the respondent told the researcher they did not wish to discuss a particular event in detail their wish was respected (but this was unusual). Some children were understandably tearful in remembering painful losses, but in all cases it was ensured that the respondent was in a relatively positive mood by the end of the interview. In the second interview the researcher was more directive, clarifying areas she did not understand, and asking more focused questions to explore attitudes and beliefs.

Although the primary researcher was a child psychiatrist she did not conduct a formal clinical interview structured to elicit pathological symptoms. The aim was to allow children to frame their response to the war in their own terms, and not be overly influenced by the researcher’s
expectations of its effects upon them. The intention was to see how they constructed their own concepts of well being, and the salience of symptoms within those constructs. Thus the interview included open-ended questions on well being framed in a variety of ways: such as, how is your life today? Do you have any worries or fears? Have you changed from before the war? Are there any difficulties? Any significant responses to such questions were then followed up, including more in-depth clinical and symptomatic exploration if this seemed warranted. The lead came from the child. In addition if they had experienced losses, an exploration of their reactions followed.

The lifeline

The adolescents were asked to draw a lifeline as a non-verbal method of exploring their past and present subjective sense of psychological well being. This lifeline is an adaptation of an instrument developed by Gergen (1988). A grid was constructed with the x-axis representing calendar years in the adolescent’s life and the y-axis representing overall psychological well being expressed as a percentage. Thus 100% represented “wonderful” or “completely well” and 0% represented “awful” or “completely unwell.” The adolescents were asked to place a dot on the grid showing how well they remembered feeling for each year of their lives, from the year when they were 5. The dots were then joined to produce a lifeline. This allowed less articulate adolescents to express subtle differences in feeling and relative differences between years. A score was established on the basis of the position of the final (most recent) dot in relation to the best year of their lives: adolescents received a score of 1 (well) if it was in the same position as their best year, that is they were as well now as they had ever been. A score of 2 indicated a less than 25% drop from their best year (equivocal). A score of 3 indicated a more than 25% drop from their best year (less well). Figures 1 and 2 provide examples of lifelines from both towns. The narratives that accompanied some of these lines are given below.

Participant observation

The primary researcher was engaged in the life of both communities from September 1997 to August 1998. The week was divided equally between the two towns. She participated in all the activities of normal life: shopping, socializing, and attending family celebrations, holidays and religious festivals. This meant that she was able to see family life from the inside; to understand the social and political context through their eyes, and to explore the way well-being is constructed in that environment. She also talked at length with teachers, and all four schools allowed her to sit in a number of classes to observe the classroom conduct of the respondents.

School marks

The child’s end of year grade average was taken as a measure of social function (5 = Excellent, 1 = Failure). The researcher discussed the child’s general performance with their parents and teachers.
Figure 1. Lifelines, primary school girls, Gorazde. Individuals are coded to retain anonymity. G refers to children from Gorazde, F refers to children from Foca. Numbers refer primary school children, letters to children from secondary school.
Figure 2. Lifelines, secondary school boys, Foca.
Unblinding to checklist scores

At the end of the year of fieldwork, the primary researcher unblinded herself to the child’s checklist scores. This meant that she could return to those children who had high scores to check on how they had felt when filling in the checklist, and to explore whether any symptoms continued to be significant, or troublesome.

Qualitative results

Qualitative data were analyzed with a grounded theory approach (Glaser & Strauss, 1967). Rather than working from a priori assumptions, theory is generated from the data in the course of close inspection through repeated reading, in order to identify patterns and themes. Clusters of responses emerge and are then categorized. This process was supported by computer software for qualitative analysis (Nud*ist 4).

Overall well-being measure

Prior to unblinding to the symptom checklist scores, children were classified as well or less well on the basis of the other four qualitative assessment measures:

- The child’s subjective assessment non-verbally expressed by the lifeline score;
- The researcher’s impression drawn from observation and interview;
- Parents’ and/or teachers’ view;
- School marks as a measure of function.

Particular importance was given to a negative subjective view expressed by a lifeline score of 3. If children categorized themselves as “less well,” regardless of other measures, this was accepted. If they categorized themselves as “well” (1) or “equivocal” (2) on the lifeline, they were only categorized as “less well” overall if they came across as less well on the basis of at least two of the other three measures. Thus poor school marks, parental anxieties or researcher impression, on their own, were not enough to classify a child as “less well.” Using the qualitative criteria described above, just over half (N = 21) of the adolescents (12 girls and 9 boys) in the study could be classified as psychologically “well” 17 (8 girls and 9 boys) as “less well.” There were slightly more “less well” adolescents in Foca. Two children were difficult to place because in spite of good marks and positive parent and teacher views, the lifelines were equivocal, and although they denied being troubled by symptoms in their interviews some aspects of their presentation left the researcher uncertain. Their overall well being was defined as “Equivocal.”

The majority of the “less well” children mentioned symptoms in their narratives. G8 was from Gorazde. She had witnessed considerable domestic violence as a child, seen her house burn down at the beginning of the war, and had seen her best friend die in front of her. She felt some little consequences [of the war] because I prefer shouting; I just can’t keep quiet. I think I am a nervous person and I just dump these nerves on my brother. She was also afraid of the dark, had memory loss and poor concentration.
Discussions about losses were particularly revealing. Of the 25 of the respondents who had lost a family member or close friend, four were still actively grieving. F9 from Foca lost his elder brother in the first year of the war. He still thought of him most days, and worked actively to keep the memory alive by watching the video of the funeral on a weekly basis, and talking about him with his parents. He idealized him and tried to be as like him as possible. He was sad and often cried when he was alone. He told me: sometimes I am not able to learn, I am not interested in anything, I don’t want to play . . . . Nothing. His parents told me he disliked being alone. In spite of this he was doing well in school. The pronounced fall in his lifeline reflected his misery but unblinding revealed a low symptom checklist score.

Feeling “less well” could be more related to post war circumstances than war events. FA who spent much of the war evacuated to Belgrade, wrote in her story of her longing to return to Foca and see her old friends. On her return she was deeply disappointed. The town and her friends had changed and she found the academic demands of being in high school almost unbearable. When we discussed the big downward swing in her lifeline since the war she told me: Everything is going wrong I didn’t expect so much pressure . . . . It makes me nervous.

There were a number of children classified as “well” who did report some symptoms. In most cases these consisted of intrusive memories in the form of dreams or pictures triggered by particular places. The incidence of these traumatic memories was diminishing with time; they did not result in avoidance, and were seen by the children as a normal response to the events of the past. For example G2 regarded herself as very well and her parents agreed. She was enjoying her life, doing outstandingly at school. Her biggest worry was that wearing glasses might stop her attracting a boy she liked. She still had vivid intrusive memories from the war, of when she had come across three dead bodies in the street and had to step over one to get home. Now when I pass that place, I have a picture of how I stepped over that body, and the blood and everything. She preferred not going that way but still did: I get scared, I close my eyes. (Pause) I’m frightened, as if it is happening again. And then I pass. However the memory was growing less frequent and she did not see it as affecting her, or requiring treatment. In addition in both her written story and in interview she made clear that remembering was important because she believed the way to prevent a future war was to remember this one. I think that I will always have that image in my memory[ . . . ] the consequences of the war will never be wiped out. Four years of suffering and anxiety are over but we shouldn’t forget them!

Unblinding to the self-report symptom checklist scores revealed that 5/20 children that had been classified as “well” on the basis of the four qualitative measures had high symptom checklist scores. In addition 4/20 children who had been classified as “less well” had low symptom scores (including F9 described above). In four of the five cases where a child’s valuation of well (1) on the lifeline had been overridden because of the other qualitative measures, the symptom checklist score was also high. The high HTQ scores of the two equivocal children confirmed the difficulty of categorizing them.

Discussion after unblinding revealed that the majority of high scorers classified as “less well” by the other measures continued to have some symptoms. The five high scorers who were classified as “well” on other measures no longer had any. They had responded to transient events: such as bad marks at school, or family conflict. F2 for example told me that she had
filled her checklist in the day after a terrible row with her parents, about running up a huge phone bill because of listening to an astrology chat line. She had felt “suicidal” at the time.

Quantitative results

Results are reported first from the sample as a whole \( (N = 336) \) and secondly from the sub-sample of high and low scorers of self-reported symptom checklists \( (N = 40) \).

Self-report symptom checklists

The mean scores for anxiety/depression on the HSCLC-25 was \( 1.58 \) (\( SD .41 \), range .96–3.16) and for trauma on the HTQ was \( 1.67 \) (\( SD .44 \), range 1–3.19). Both scales demonstrated good internal consistency (\( \alpha = .81 \) and .82, respectively). Of the participants in the sample, 25.3\% \( (N = 85) \) met the DSMIV criteria for anxiety/depression using the same cut off scores devised by Mollica with an Indocheinese population (Mollica et al., 1991a, 1991b, 1992). Conversely, only 5.7\% of the sample \( (N = 19) \) exceeded the cutoff point for PTSD. Responses on the depression/anxiety and trauma scales were highly correlated \( (r = .80, p < .001) \).

Self-reported symptoms by town

A by town analysis showed no significant differences in children’s scores of either anxiety/depression \( [F(1,334) = .24, ns; means, Gorazde: 1.59, SD .41; Foca: 1.56, SD .38] \) or trauma \( [F(1,334) = .06, ns; Gorazde: 1.69, SD .46; Foca: 1.68, SD .41] \) in the two towns. There were no significant differences in the percentage of children in the two towns exhibiting above cutoff point scores for anxiety/depression \( [\chi^2(1) = 1.4, ns; Gorazde 27.9\%; Foca: 22.2\%] \) and trauma \( [\chi^2(1) = .61, ns; Gorazde: 6.6\%; and Foca: 4.6\%] \).

Self-reported symptoms by gender

Females reported significantly higher levels of anxiety/depression symptoms \( [F(1,334) = 13.65, p < .001; means, males: 1.46, SD .33, females: 1.67, SD .44] \) and trauma symptoms \( [F(1,334) = 23.8, p < .001; males: 1.60, SD .38, females: 1.77, SD .47] \). Equally, more females were found to score above cutoff points \( [\chi^2(1) = 11.92, p < .001 and \chi^2(1) = 7.18, p < .01, respectively] \). There was no interaction between gender and town of origin.

Sub-sample of high and low scorers

Table 2 presents a summary of data of the symptom scales, measures of well being and demographics of the selected sub sample of 40 high and low scoring children. As was expected, the two groups of high and low scorers were clearly discriminated in terms of self-reported anxiety/depression \( [F(1,38) = 146.35, p < .001] \) and trauma \( [F(1,38) = 193, p < .001] \). Furthermore, the majority of the high-scorers (90\% \( N = 18/20) \) met the DSMIV criteria for
Table 2
Descriptive information on the sub sample of high and low scorers

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<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
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<tbody>
<tr>
<td></td>
<td>Low scorers</td>
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<tr>
<td>Symptom scale scores</td>
<td></td>
</tr>
<tr>
<td>HSCL-25</td>
<td>2.40 (.23)</td>
</tr>
<tr>
<td>HTQ</td>
<td>1.20 (.14)</td>
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<tr>
<td>Demographics (%)</td>
<td></td>
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<tr>
<td>School</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>12 (60%)</td>
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<tr>
<td>Secondary</td>
<td>8 (40%)</td>
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<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>10 (50%)</td>
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<tr>
<td>Females</td>
<td>10 (50%)</td>
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<tr>
<td>Qualitative</td>
<td></td>
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<tr>
<td>Lifeline responses</td>
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</tr>
<tr>
<td>Well</td>
<td>15 (75%)</td>
</tr>
<tr>
<td>Equivocal</td>
<td>2 (10%)</td>
</tr>
<tr>
<td>Less well</td>
<td>3 (15%)</td>
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<tr>
<td>Overall evaluation</td>
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</tr>
<tr>
<td>Well</td>
<td>16 (80%)</td>
</tr>
<tr>
<td>Equivocal</td>
<td>0</td>
</tr>
<tr>
<td>Less well</td>
<td>4 (20%)</td>
</tr>
<tr>
<td>School marks</td>
<td>3.5 (.95)</td>
</tr>
</tbody>
</table>

anxiety/depression. However, only a small proportion of high scorers met the DSMIV criteria for trauma (40%, \(N = 8/20\)).

**Self-reported symptoms and other measures of well being**

*Lifeline.* Non-parametric correlation was used to assess the relationship between self-report symptom checklist scores and the measure taken from the lifeline (well = 1, equivocal = 2, less well = 3). High anxiety/depression scores were positively related to a negative lifeline score \(r_s = .33, p < .05\). There was also a positive correlation between high scores on the trauma scale and negative lifeline scores but it did not reach significance \(r_s = .27, p < .08\).

*Overall well being.* A total of 80% of children identified as well by qualitative means had low scores on the combined anxiety/depression and trauma checklists; 65% of children identified as “less well” had high scores on the combined lists. A further comparison between the well and less well group revealed that the later reported significantly more symptoms of anxiety/depression \([F_{(1,38)} = 8.76, p < .01]\; well: 2.97, SD 1.15; less well: 4.14, SD 1.28) and trauma \([F_{(1,38)} = 12.94, p < .01]\; well: 1.48, SD .52; less well: 2.19, SD .70).
There were no differences between boys’ and girls’ levels of well being as revealed by the lifeline $\chi^2(2) = .56, \text{ns}$ or by the overall qualitative measures of feeling well/less well $\chi^2(2) = 2.48, \text{ns}$.

Schoolmarks. Marks at school were unrelated to anxiety/depression or trauma scores (anxiety/depress $r_s = -.02, \text{ns}$; trauma $r_s = -.14, \text{ns}$) and also had a low positive correlation with lifeline scores ($r_s = .08, \text{ns}$). Children identified as “less well” and “well” had no significant differences in their schoolmarks $F(1,38) = 1.42, \text{ns}$.

Discriminant analyses of self-reported symptoms

Three direct discriminant functions analyses were conducted to examine first whether, and second which, items of the symptom checklist distinguished between low and high scorers. One discriminant function was calculated for each of the three analyses and resulted in statistically significant separation between the two groups of low and high scorers: HSC25 anxiety $\chi^2(10) = 40.53$, HSC25 depression $\chi^2(15) = 65.06$, HTQ trauma $\chi^2(16) = 81.75$. The loading matrix of correlations between the predictor variables (questionnaire items) and the discriminant function are presented in Table 3 (higher correlation coefficients indicate better discrimination). Compared to the anxiety scale, the depression and trauma check-lists discriminated better between high and low scorers.

Further discriminant analyses based on the qualitative classification of the two groups (“well” or “less well”) did not result in an adequate separation of these two groups.

Table 3
Correlations of checklist items with the discriminant function of low–high scorers

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<thead>
<tr>
<th></th>
<th>HSC25 Anxiety</th>
<th>HSC25 Depression</th>
<th>HTQ</th>
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</tr>
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Canonical $R$ : .84 .94 .97
Eigenvalue : 2.46 7.44 14.24
Discussion

When considering these results one must bear in mind some limitations to the study design. Regarding the main sample the schools and allocated classes were not randomly chosen. However, it was apparent that there were no significant differences with the other classes of children of a similar age group in the two communities. With the sub-sample it was not possible to randomize completely the selection of low and high scoring children because of the intensive cooperation required. The children who refused to participate in the qualitative part of the study did have particular characteristics: the bulk of refusals came from boys with low scores, in both primary schools, and from one particular primary class in Gorazde. One explanation might be that most young boys who see themselves as “symptom free,” feel they have better things to do with spare time than talk to a female interviewer about feelings and experiences. A few of these boys were identified by staff as having behavior problems in school. In Foca some of the refusals are likely to have come from families hostile to a researcher from a NATO country. In Gorazde there was the added problem of one class having an influential teacher who regarded anything psychological as “stupid.” This created a ‘regression towards the mean’, particularly with the low scorers. However there was no significant difference with the group that was finally included, and all the respondents in the sub-sample came from within the highest and lowest quartiles when looking at the full range of scores. It may mean the study sample is slightly biased towards the more symptomatic group in the population, including those who felt psychological well being worth discussing, and away from those who lacked symptoms or denied them. This should not invalidate a discussion of the usefulness of self-report checklists in assessment as compared to other methods.

A second problem was the time lag between filling in the self-report symptom checklist and conducting the interviews. This was unavoidable. Given the persistence of symptoms in high scoring children who felt less well, this factor does not appear to be significant. A third limitation is the small sample size. The findings must be considered as limited to this particular cultural group at this particular period. It does not mean that the lessons learned may not have applicability in other war-affected societies.

Finally the cutoff scores used with the checklists are derived from Western psychiatric constructs of disease. In the absence of large scale community studies using the instruments in the area, it is uncertain whether these cut off scores are appropriate for this population (Mollica et al., 1991a, 1991b). For this reason the researchers paid more attention to whether or not individuals had high or low symptom scores.

The significant correlations between self-report symptom checklist scores and the lifeline, and between checklist scores and overall measures of well-being suggest that such self-report symptom checklists could be useful as public health measures for populations in war affected societies. The checklists successfully identified 76% of those assessed as less well and 76% of those assessed as well, by other qualitative measures. This level of criterion validity is in keeping with other findings. Mollica found that the HTQ had a specificity of .65 and sensitivity of .78, and the HSCL 25 a specificity of .76 and sensitivity of .93 in an Indo-Chinese population exposed to long-term political violence (Mollica et al., 1991a, 1991b, 1992).

High levels of symptoms detected by these checklists appear on the whole to reflect enduring and significant levels of distress elicited by non-pathological interviews. The persistence of
symptoms that some children found significant, more than 2 years after the end of the war, is in keeping with other research (AACAP, Macksoud & Aber, 1996; Sack, Him, & Dickson, 1999; Servan-Schreiber, Lin, & Birmaher, 1998). However these symptoms are not necessarily related to the conflict.

The lack of correlation between school marks and either the checklist score or lifeline, suggest that social function alone is not a sufficient measure of well-being. This was born out by discussions relating to social function in the narratives and observation of the children. Those children who perceived themselves as less well could not be distinguished in terms of their general behavior in public or their engagement in the activities of daily living. This finding supports the view that good social functioning may hide significant emotional distress (Mollica, Poole, Son, Murray, & Tor, 1997; Sack et al., 1999). One can be very miserable and still do well in school.

The primary researcher’s experience also suggests that when using mass administered questionnaires, the administration process should be given time, and strictly and consistently supervised. Witnessing the difficulties children had during the pilot, indicated which questions required further explanation, but it meant that one could not simply leave the questionnaire for them to complete alone.

The number of children (9/38) whose overall well-being was not reflected in the symptom checklist score suggests that use of a self-report checklist as a clinical screening instrument on its own is problematic. This is reinforced by the fact that discriminant functions analysis could distinguish high and low scorers but not the “less well” from the “well.” Self-report scales may pick up transient emotional states that are not significant to the individual, and result in the unnecessary pathologizing of normal distress. They may fail to identify those who cannot or do not wish to express their distress in symptomatic terms. This discrepancy may be for cultural reasons. In Balkan society as a whole, the admission of psychological difficulties is stigmatizing. In addition, visible emotional distress is seen as less appropriate in men, particularly in Muslim culture which values stoicism. This study, like many others (Green et al., 1991; Kuterovac et al., 1994; Macksoud & Aber, 1996), showed significantly higher symptom levels for girls than boys. It has been debated as to whether this means that girls actually experience more distress, or find it easier to acknowledge it in this form. The absence of any gender difference when using the other qualitative measures of assessment would suggest the latter. So would the reported presence of behavioral problems in many of the non-participating boys with low checklist scores, and the fact that it was mainly in girls that the checklists detected transient emotional distress. Although it should also be noted that for a few boys, self-report checklists might offer an anonymous space in which to acknowledge symptoms, which would be denied in face to face encounter. G4, the highest scoring boy in Gorazde, only acknowledged that he had persistent, troubling symptoms in a discussion of his high score after unblinding, He had denied them in earlier interviews, explaining that it was very important to pretend to be well.

In addition, a symptom-based approach is sometimes tied in with a single diagnosis and model of causation that limits the expression and understanding of post-conflict distress (DeJong et al., 2000). A PTSD scale such as the IES may fail to distinguish between grief and PTSD in traumatized children (Mcnally, 1996). The inclusion of a depression scale in this study failed to identify grief and loss in some extremely distressed children, such as F9.
It required narrative discussion to discover these feelings, by allowing the young people to frame them in their own language. This finding is in keeping with other research in societies affected by political violence (Munczek & Tuber, 1998). Political violence is not a homogenous entity, and distress can take particular forms in different communities (Cairns & Dawes, 1996).

Narrative discussion also made clear that many children, particularly in Foca, linked their distress, whether expressed as symptoms, or less explicitly in the lifeline, to discomfort with the current atmosphere and situation in the town rather than with the war itself. They talked of the disinterest of teachers, combined with a heavy burden of homework; feelings of isolation; the change in people’s behavior; and their growing cynicism with adult behavior. Such distress would be missed using trauma scales that only ask children to focus on a particular event.

Narrative discussion allows a more extensive approach to the concept of well-being. Such interviews are time-consuming and impractical as a means of screening. The lifeline required less time. It is a visual instrument that allows inarticulate and less intellectual respondents to set their current feelings in the context of their whole lives and to demonstrate their subjective view of the relative impact of different events. This demonstrated that for some children, domestic conflict, school and relationship stresses were of more significance than war. It allowed them to give well-being a holistic value without asking them to find words for indescribable feelings.

The fact that the majority of parents gave their children very low scores on the CBCL yet acknowledged specific problems in the more general discussion also highlights the problem of symptom checklists for rapid assessment. In populations anxious to show that they are coping well a clinical format may provoke underscoring. A non-clinically focused interview can be far more revealing. In contrast to some studies (Menally, 1996; Mollica et al., 1997) parental perceptions of well-being that emerged in the narrative interview were remarkably consistent with their offspring (only 3 out of 24 were unaware of their children’s difficulties). This may be because of the home-based nature of adolescent life in this society, and the fact that other studies have had a symptomatic rather than narrative focus. Teacher reports on the older children were less consistent, perhaps because teachers are more influenced by grade average.

Participant observation over time (seeing the child in school and with their family or out and about) proved invaluable for a real assessment of functioning and overall well-being. In particular it is one of the only ways of assessing an avoidant child.

Implications

This study suggests that a symptom counting focus may be useful for epidemiological purposes, but that aid agencies planning clinical programs should use this approach with caution. Used alone, it may create a number of difficulties. It may result in the unnecessary pathologizing of those who are well. It may miss those whose distress cannot be expressed in symptomatic terms, and it may result in inappropriate treatment.

A symptom based approach has political and resource implications. Identifying suffering simply in terms of psychological symptoms caused may result in the creation of counseling programs offering the individual symptomatic relief. However those identified as symptomatic may actually perceive some other form of intervention as more beneficial to their mental health (Jones, 1998; Somasundaram, 1996). Children in this study identified the return of friends,
more things to do, less homework, the rebuilding of houses, being able to return home, and the arrest of profiteers and war criminals as things that would make them feel better. These require more costly social and political interventions but they have the advantage of addressing the problem at a communal level, and thus helping to repair the social world in which the young person lives. Helping to foster new networks may be the most vital form of assistance: 76% of the Rwandan children surveyed by UNICEF said that the passage of time and making new friends had made them feel better (UNICEF, 1996). Young people may find such interventions preferable to the possibly stigmatizing experience of being singled out as psychologically unwell (Bracken, Giller, & Summerfield, 1995; Eisenbruch, 1991; Martin Baro, 1990; Summerfield, 1999). The seven “less well” children in this study that caused me most concern, were all offered psychological assistance in the form of individual counseling. One preferred to use traditional methods, one accepted, the others refused, feeling it would not be of help.

Summary and conclusions

In summary research would suggest that the HTQ and Hopkins SCL-25 (used in combination as a self-report symptom checklist) is a useful means of assessing the prevalence of psychological distress in Bosnia–Herzegovina. Acknowledgment of high levels of symptoms does correlate reasonably well with other means of assessing well-being. However in almost a quarter of the participants in this study, the presence or absence of symptoms, as reported in the checklists, was misleading as to the well-being of the child. This was either because the checklist picked up transient emotional states or because it excluded those who could not express their distress in symptomatic terms. This suggests that in this type of population, self-report checklists on their own are not an adequate means of clinical screening. Well children may be labeled sick, and those in need may be missed.

Checklists used in combination with other non-symptom focused approaches such as narrative methods, should make it possible to identify those in need and avoid pathologizing those for whom the presence of symptoms is not significant. A nonverbal instrument such as a lifeline takes a holistic approach to well-being. It allows the less articulate to express feelings, provides a non-stigmatizing way to express distress and permits relative changes over time to be assessed even when the overall level of well-being is high. It could be combined with brief narrative discussion, and a symptom checklist, to allow a more comprehensive assessment that could work in a wide range of cultures. Particular attention should be given to those who have suffered a personal loss, and their experiences should be explored in interview. However only external reports and observation will identify who are emotionally avoidant and functioning poorly as a result. Finally the effectiveness of communal, non-symptom focused treatments and approaches, addressing cultural, social, economic and political needs should be considered in treating psychological distress.

Acknowledgments

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References


Résumé

Objectif: Établir une comparaison avec l’usage d’instruments qui font une auto-collecte de symptômes et l’usage de méthodes qualitatives pour mesurer le bien-être psychologique d’adolescents vivant dans une société touchée par la guerre.

Méthode: Dans deux collectivités ennemies du conflit bosnien, on a recueilli un échantillon de 337 jeunes âgés de 13 à 15 ans (183 de Garazde et 154 de Foca). Ils ont complété le Hopkins Symptoms Checklist et le Harvard Trauma Questionnaire. Basé sur leur score combiné, on a composé un sous-échantillon de 40 adolescents et adolescentes représentant proportionnellement les deux sexes de l’échantillon original et comprenant un nombre égal de participants ayant des scores inférieurs et des scores élevés. Durant les six mois qui ont suivi, on a évalué ce petit groupe au moyen de méthodes qualitatives telles que des entrevues avec l’enfant et le parent et les observations des évaluateurs. Le rendement scolaire servit de mesure pour le fonctionnement social.

Résultats: Mesures qualitatives: Certains des enfants perçus comme étant “moins sains” selon les méthodes qualitatives ont nié avoir des symptômes. Certains enfants perçus comme “sains” manifestaient des symptômes qu’ils considéraient sans importance pathologique. Il semble que se sentir “moins sain” serait l’effet des circonstances d’après-guerre plutôt que de la guerre elle-même. Mesures quantitatives: Deux items de la liste de symptômes s’avèrent capables d’assurer une cohérence interne et une validité discriminante. Toutefois, lorsqu’on compare l’ensemble du bien-être, on note que pour 9 des 40 cas la présence ou l’absence de symptômes ne correspond pas au bien-être de l’enfant. Des éléments des deux questionnaires n’ont pas su discriminer de façon fiable parmi les enfants qui par d’autres mesures se sont avérés “sains” ou “moins sains.”

Conclusions: Les listes qui auto-cotent peuvent servir de mesure en santé publique pour connaître la prévalence de la détresse psychologique dans des régions touchées par la guerre, mais pour des fins cliniques, elle ne sont pas des mesures adéquates. Les utiliser de paire avec d’autres mesures qualitatives permet de déceler les personnes en besoin et d’éviter de les étiqueter de “pathologiques.”

Resumen

Objetivo: Comparar la utilización de autoinformes de listados de síntomas con la utilización de métodos cualitativos para evaluar el bienestar psicológico adolescente en una sociedad afectada por la guerra.

Método: La muestra fue seleccionada en el ámbito escolar y estaba compuesta por 337 participantes de entre 13 y 15 años pertenecientes a dos comunidades de bandos opuestos del conflicto de Bosnia (183 de Gorazde y 154 de Foca). Todos ellos completaron el Hopkins Symptoms Checklist y el Harvard Trauma Questionnaire. En base a las puntuaciones combinadas en el listado de síntomas, se seleccionó una submuestra, balanceada según el género de los sujetos, compuesta por 40 adolescentes y que incluía un número igual de sujetos con puntuaciones altas y bajas de cada bando del conflicto. Después de transcurridos seis meses se procedió a evaluar a esta submuestra (sin conocer sus puntuaciones en el listado de síntomas) con métodos cualitativos que incluían entrevistas narrativas del niño/a y del padre y observación participante. Las notas del colegio fueron tomadas como medidas del funcionamiento social.
**Resultados:** Cualitativos: Algunos niños/as identificados como “menos bien” por los métodos cualitativos negaron la presencia de síntomas. Algunos niños/as identificados como “bien” tuvieron síntomas que no tenían significación patológica para ellos. El sentimiento subjetivo de estar “menos bien” puede estar más relacionado con las circunstancias posteriores a la guerra que con los acontecimientos de la propia guerra. Cuantitativos: Los ítems de los dos listados de síntomas han mostrado buena consistencia interna y buena validez discriminante. Sin embargo, la comparación con el bienestar global reveló que todavía en 9 de 40 casos en que se notificó presencia o ausencia de síntomas no se obtuvo una correspondencia con el bienestar del niño/a. Los ítems de los dos cuestionarios no discriminaron de manera fiable entre los niños identificados como “bien” o “menos bien” por otros medios.

**Conclusiones:** Los listados de autoinforme pueden ser útiles como medidas de salud pública para evaluar la prevalencia de malestar psicológico en zonas afectadas por la guerra, pero no son un medio adecuado para el “screening” clínico. Los listados de síntomas utilizados en combinación con otras aproximaciones cualitativas hacen posible identificar a aquellos sujetos en situación de necesidad y evitan una innecesaria patologización.