

Norwegian Adolescents' Reactions to Distant Warfare

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Abstract. A total of 1695 Norwegian adolescents answered a questionnaire concerning how they perceived and reacted to the threat of war during the 1999 Kosovo war and the 2003 Iraq war. Based on previous research and clinical experience the following hypotheses were formed: a) The Kosovo war, being in closer proximity to Norway, will result in more reactions than the Iraq war; b) There will be more communication between adolescents and adults following the Iraq war than following the Kosovo war, due to education by psychologists via the media in the intervening period; c) Girls will evidence more reactions than boys, in line with previous work; d) Adolescents who score above cut-off on the Impact of Event Scale will report less communication with friends and parents, in line with psychosocial theories of posttraumatic stress and previous empirical findings. The first three hypotheses were generally supported, but findings regarding hypothesis (d) were mixed. It is believed that a more open communicative climate has developed in families and schools following increased attention by professionals and media to the coverage of wars and disasters in the media. Mild reactions to the two wars suggest adolescent resilience. Professionals can play an important role in disseminating information on how such events can be handled by parents, professionals and society at large.

Keywords: Adolescents, war, PTSD, communication.

William Yule

Having been introduced to William Yule's insightful thinking through his work on children, Post Traumatic Stress Disorder (PTSD) and disasters (Yule and Williams, 1990; Yule, Udwin and Murdoch, 1990), I found it important to involve him in UNICEF work during the conflict that erupted in former Yugoslavia in the early 1990s. With much energy and dedication he soon applied his vast clinical and research expertise to this matter. Under his auspices a "standardized" battery of instruments to use for children in war was developed, a move that has taken this field from scattered reports of dubious quality to studies that have given us a much more solid knowledge base for planning interventions for children affected by warfare and disasters. His work for the Children and War Foundation (www.childrenandwar.org) has led to two very practical cognitive behaviourally based manuals for children (Smith et al., 1998, 1999). Together with his London group and Bosnian colleagues he managed to set up a unique service for children and their families in Mostar, Bosnia, an effort that also has resulted in important papers on children and war (i.e. Smith, Perrin, Yule and Rabe-Hesketh, 2001; Yule, 2000). His brilliantly focused mind combined with a warm heart has for nearly half a

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century served children in different corners of the world. While I write these words he is in Sri Lanka to help organise services for children affected by the 2004 tsunami. He has promised to use more time for the Children and War Foundation as he retires, and it is quite fitting that a special issue is honouring the achievements of this kind, generous man.

Introduction

Children directly exposed to warfare experience a variety of stressors and develop both short-term and long-term reactions (see Barenbaum, Ruchin and Schwab-Stone, 2004 for a review). Girls usually report higher levels of distress than boys (Dyregrov, Gupta, Gjestad and Mukanoheli, 2000; Kuterovac, Dyregrov and Stuvland, 1994; Ronen, Rahav and Rosenbaum, 2003). While research over the last decades has improved our knowledge about the effects of children and adolescents in the midst of war, less is known about the perception of threat of war in children and adolescents in relatively close proximity to war or possible war, with Israeli studies as an exception. Although they were struck by some SCUD missiles in the Gulf war of 1991, most Israeli families had to face the threat of war (and use of chemical weapons) more than actual warfare. Milgram (1994) reported habituation to the war threat in children in a review of selected studies about the effect of the Gulf war on the Israeli people. Second and sixth-grade children who were studied before and after this war showed an increase in behaviour problems, with younger children reporting more problems (Rahav and Ronen, 1994). Schwarzwald, Weisenberg, Waysman, Solomon and Klingman (1993) showed that both the probability of an attack (i.e. living in an area under direct threat of SCUD-missiles) and exposure to the results of attack (i.e. physical closeness to damage sites or emotional closeness to individuals that had been hit) had distinct contributions to the manifestation of post-war stress reactions. Girls reported higher levels of stress than boys, but in areas not hit this effect was reversed. Reports have found that girls are more sensitive to threatening stimuli than boys (Johnson, 1982; Magnusson, 1982). Dyregrov and Raundalen (2003) also documented extensive fear in Iraqi children in the month prior to the war in Iraq.

Following the Second World War and the advent of the “Cold War”, the threat of nuclear war was a constant worry for many children and adolescents (for a review see Boyd, Wallinga, Skeen and Paguio, 1994). The first study regarding this subject dates back to 1947 (Remmers, Gage, Hobson and Shimberg, 1947). Over the next 40 years it was an active field of study, addressing adolescents’ perception of this threat, and indicating varying levels of worry (see Tudge, Chivian, Robinson, Andreyenkov and Popov, 1991). Since the fall of the Berlin wall and the break up of the Soviet Union, this threat has become much less an issue in adolescents’ minds and as a research subject. Although the nuclear threat has diminished, several wars during the last 15 years have been dramatically depicted by modern television media, bringing more “live coverage” from actual warfare into the homes of citizens across the globe. Knowledge of how this distant warfare impacts upon children and adolescents is largely absent.

In 1991 the Gulf war became the first war to be sent “live” on television throughout the world. Norway had ships in the Persian Gulf, but was not actively engaged in the war. In the Kosovo war in 1999, Norway was directly involved in the war, though to a very limited degree, having fighter airplanes at the disposal of the NATO forces. As a country this was the first time Norwegian forces were involved in warfare since the Second World War. The media coverage was extensive and few children and adolescents could escape exposure to the dramatic stories

that were broadcast. Compared to the 1991 Gulf war and the 2003 Iraq war, the Kosovo war took place in Europe, in much closer physical and cultural proximity to Norway.

In 2003 both the build-up and outbreak of war in Iraq filled the TV screens throughout the world, again creating a climate of fear for the possible consequences. Norwegian forces were not directly involved, although a smaller group of officers took on what was termed a humanitarian operation. However, the television pictures from the Iraq war that filled Norwegian TV screens for days on end contained more scenes depicting sensory details of human remains and blood than the Kosovo war.

Dyregrov, Frykholm, Lilled, Broberg and Holmberg (2003) advocated that, following disasters, the focus should be broadened from only direct physical exposure to a crisis event to the emotional exposure in the form of the "felt" distance to those involved in disasters. They based this on their study of the way that adolescents throughout Göteborg reacted following a tragic discothèque fire that killed 63 people and injured many. Here the psychologically felt distance to those who were present determined their reactions. Terr and co-workers (Terr et al., 1996), in a study of the effects of the explosion of the space shuttle Challenger in 1986, argued that certain disasters, especially disasters with an intense media-coverage, can impact upon children and adolescents far removed from the scene of events, even across a whole nation. They used the term "distant trauma" to describe reactions to a disastrous event from a remote and safe distance. Both the Kosovo and Iraq war were events with intense media coverage, in some ways a potentially distant traumatic event. However, the Kosovo war was in much closer "psychological proximity" to Norwegian adolescents, happening almost at our doorstep and to people who in appearance and culture are closer to Norwegians than people from the Middle East. The psychologically felt distance is less and more reactions may therefore be expected among Norwegian adolescents.

Previous empirical work, including research from Bill Yule's group, has found that adolescents' social support, and the support that they receive at school, is a major influence on their subsequent adjustment to frightening events (Udwin, Boyle, Yule, Bolton and O'Ryan, 2000; Vernberg, La Greca, Silverman and Prinstein, 1996), a finding that is broadly in line with cognitive and psychosocial theories of posttraumatic stress reactions (e.g. see Meiser-Stedman, 2002 for a review; and see Joseph and Williams, this volume). Beginning during the Kosovo war, but increasingly so following the 2001 September 11 terrorist attack and before and during the 2003 Iraq war, psychologists (the authors included) and others have used the media to advocate that parents, teachers and other adults spend time with children talking, informing and explaining the news to them, as well as limiting their repeated exposure to graphic details. Parents were also advised to validate children's reactions and reassure them that the risk of war spreading to Norway was next to nonexistent. The major Norwegian TV stations have interviewed experts who have given advice in this matter, as well as providing information to guide parents on their websites. Newspapers have reinforced this message.

With the increasing media coverage of modern conflicts it is important to know how these events are handled within families and the school setting in order to provide proper guidance on how to deal with future events. In this report the focus will be on how Norwegian adolescents perceived the threat of war during the 1999 Kosovo war and the 2003 Iraqi war, and how they perceived the interaction with adults in this respect. On the basis of previous studies and clinical experience we propose the following hypotheses: a) The Kosovo war, being in closer proximity to Norway, will result in more reactions than the Iraq war; b) There will be more communication between adolescents and adults following the Iraq war than following

the Kosovo war, due to education by psychologists via the media in the intervening period; c) Girls will evidence more reactions than boys, in line with previous work; d) Adolescents who score above cut-off on the IES will report less communication with friends and parents, in line with psychosocial theories of posttraumatic stress and previous empirical findings.

Method

Procedure

Data from the Kosovo war were collected from seven schools across Bergen, Norway. During the Iraq war data from seven schools in Bergen and Oslo were gathered. A letter explaining the study was circulated to the Head teacher of the schools, outlining the purpose of the study. Schools that agreed to participate then received questionnaires that were administered in the classroom under teacher supervision. Before filling in the questionnaire the students were informed about the purpose of the study. During the Kosovo war students filled in a questionnaire 4–5 weeks after the NATO actions started, while students filled in the questionnaire 5 weeks after the Iraq war started.

Measures

The questionnaires used had some questions specific to the war in question, while most items were repeated at both times. Besides demographic information about gender and school, the students answered around 50 questions that specifically asked about their perception of adult support and communication (from both teachers and parents) and their reactions to the war. Questions were in a yes/no format, or answered on a 4-point scale. The students also answered the revised Impact of Event Scale for children (Smith, Perrin, Dyregrov and Yule, 2003, www.childrenandwar.org). In previous research (Dyregrov and Yule, 1995; Yule, 1998) scores above a cut-off score of 17, based on the intrusion and avoidance score of the revised IES, was a good predictor of a PTSD diagnosis, misclassifying only 10% (Yule, 1998).

Participants

A total of 753 students answered the questionnaire in relation to the Kosovo war. None of the approached schools declined to participate and no students chose not to fill in the questionnaire. This means that 100% of the students present filled in questionnaires. Students were aged 12–15 years, representing 7th to 10th grade with 373 boys and 369 girls (11 did not indicate their gender).

A total of 1333 students answered the questionnaire in relation to the Iraq war. For the purpose of another study we included a school in Oslo with a very high number of immigrant students who themselves or their parents had been exposed to war. Students with this background evidence higher scores on measures of traumatic stress and would make it difficult to study differences between the two wars as we only had students with this background during the Iraq war. For this reason, 441 students who either were born outside of Norway or had both parents born outside of Norway were excluded, to be able to compare to the Kosovo sample where an area without an immigrant population was sampled. The number of students was thus reduced to 892. Again no school or student declined and the number represents all

students present on the day of the study. The age and grade level was as for the Kosovo sample, with 447 boys and 423 girls (22 did not indicate their gender). Some students did not answer all questions explaining various N for the different questions.

Results

Information about the war

Students reported that they had obtained most of their information from TV both during the Kosovo war ($K = 71\%$) and the Iraqi war ($I = 70\%$). Other primary sources for information were: newspapers ($K = 13\%$, $I = 11\%$), parents ($K = 4\%$, $I = 7\%$), the school ($K = 6\%$, $I = 5\%$) and friends ($K = 1\%$, $I = 3\%$). A majority of the students ($K = 58\%$, $I = 56\%$) reported that TV gave them what they regarded as an adequate level of information about the war. While 29% wished for more coverage of the war during the Iraq war and 30% during the Kosovo war, 15% and 12% wished for less coverage respectively.

Perception and reactions to the war

Table 1 shows the results from answers to some specific questions about the war. A majority of adolescents had become anxious about what had happened, although only one in ten reported experiencing much anxiety, significantly more so during the Kosovo war ($X^2(1, N = 1616) = 29.76, p < .001$). Few reported that they were afraid that Norway would become involved in the war, again significantly more so during the Kosovo than the Iraq war ($X^2(1, N = 1619) = 62.94, p < .001$). The fear of terrorist acts in Norway was low overall, but significantly higher during the Kosovo than the Iraq war ($X^2(1, N = 1616) = 23.36, p < .001$). Anxiety about anything happening to themselves or their family was likewise low, but significantly higher during the Kosovo than the Iraq war ($X^2(1, N = 1515) = 82.79, p < .001$). A large majority wished that there were more they could do to prevent war with significantly more adolescents reporting this during the Kosovo war ($X^2(1, N = 1602) = 7.73, p < .01$). When asked to consider a statement about whether the best they could do was to live normally and not think so much about what happened, significantly more adolescents answered affirmatively during the Iraq war than during the Kosovo war ($X^2(1, N = 1609) = 29.67, p < .001$).

Most adolescents reported few strong emotional reactions to the wars, with mean scores being between "no" and "a little" (see Table 1), except for anger towards those they regard as responsible for the war where around half of the groups had experienced quite a bit or much of this. Other reactions that more than 10% of both samples acknowledged with some intensity were a gloomier outlook for the future, expecting something else terrible to happen, and holding their loved ones in higher regard. As can be seen from Table 1, on three of the reactions there were small but statistically significant differences between the two samples, with adolescents reacting more strongly during the Kosovo war than the Iraq war. During the Kosovo war significantly more adolescents wanted to be closer to their parents ($X^2(1, N = 1616) = 23.82, p < .001$), looked with more gloom towards the future ($X^2(1, N = 1605) = 17.52, p < .01$), and wanted to be with someone and not alone ($X^2(1, N = 1625) = 14.32, p < .01$).

The Impact of Event Scale scores in Table 2 show that the mean total scores for the sum of the intrusion and arousal items for both groups were well below the commonly accepted cut-off

Table 1. Responses (%) to questions regarding reactions to the wars

		No/a little	Quite a bit/much
Are you anxious about what has happened lately?	Kosovo	62	38**
	Iraq	72	28
Have you been afraid that Norway will become involved in the war?	Kosovo	64	36**
	Iraq	79	21
Have you been afraid of terrorist attacks in Norway?	Kosovo	81	19**
	Iraq	89	11
Have you been afraid that something will happen to you or your family?	Kosovo	80	20**
	Iraq	93	7
<i>After the war started, have you:</i>			
Become more anxious?	Kosovo	95	5
	Iraq	95	5
Wanted to be close to your parents?	Kosovo	93	7**
	Iraq	92	8
Held your loved ones in higher regard?	Kosovo	78	22
	Iraq	77	23
Looked with more gloom towards the future?	Kosovo	86	14**
	Iraq	91	9
Become sadder?	Kosovo	96	4
	Iraq	92	8
Waited for other bad things to happen?	Kosovo	84	16
	Iraq	82	18
Felt strong anger towards those responsible for the war?	Kosovo	52	48
	Iraq	55	45
Stayed away from all the news and talk of the war?	Kosovo	95	5
	Iraq	94	6
Wanted to be with someone and not alone?	Kosovo	89	11**
	Iraq	91	9
Had many thoughts and feelings that you have not expressed?	Kosovo	95	5
	Iraq	92	8
I wish there was more we could do to prevent the war	No		Yes
	Kosovo	19	81**
The best we can do is live normally and not think so much about what is happening	Iraq	24	76
	Kosovo	41	59**
	Iraq	28	72

** $p < .01$, *** $p < .001$.

Table 2. Impact of Event Scale scores

	Kosovo		Iraq		<i>t</i> -test
	Mean (<i>SD</i>)	<i>N</i>	Mean	<i>N</i>	
Intrusion	2.57 (3.73)	718	3.74 (4.04)	887	5.98**
Avoidance	2.33 (3.72)	719	1.98 (3.37)	888	-1.98*
Arousal	1.62 (3.07)	720	2.71 (3.87)	887	6.14**
Total (Intrusion + Arousal)	4.90 (6.37)	718	5.71 (6.00)	887	2.66**

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3. Responses to statements and questions regarding communication about the war

		No/ a little	Quite a bit/ much
Have you talked about the war with your parents?	Kosovo	69	31***
	Iraq	56	44
Have you talked with any of your friends about the war?	Kosovo	70	30***
	Iraq	55	45
Do you wish that your parents had talked more with you about the war?	Kosovo	95	5***
	Iraq	97	3
Do you wish that teachers had talked more about the war?	Kosovo	76	24
	Iraq	74	26
Have teachers raised the issue in the classroom?	Kosovo	53	47
	Iraq	50	50
We youngsters talk a lot about the war	Kosovo	75	25***
	Iraq	55	45
I have wanted to ask about the war but dare not ask	Kosovo	97	3
	Iraq	95	5
Adults do not want us to know so much about what is happening	Kosovo	84	16
	Iraq	82	18
Adults do not really understand how we young people experience the war	Kosovo	73	27*
	Iraq	67	33
I think adults hide their fear from us	Kosovo	75	25
	Iraq	76	24

* $p < .05$, *** $p < .001$.

of 17, and an examination of the distribution of scores showed it to be highly skewed for both groups. Although differences between groups reached statistical significance for the three subscale scores, the magnitude of these differences was clinically unimportant. While the intrusion, arousal and total scores were significantly higher for the Iraq group, the avoidance scores were significantly higher for the Kosovo group. Using the cut-off score of 17 (for the sum of the intrusion and avoidance subscales) gave identical figures for both groups: 6% of both samples score above cut-off.

In sum, overall anxiety and posttraumatic stress reactions were low. Where differences between the groups were found, the trend was for participants to react more strongly to the Kosovo war, in line with hypothesis (a).

Communication about the event

Table 3 lists different aspects concerning communication about the event among the adolescents themselves and between the adolescents and adults (parents and teachers). Significantly more adolescents reported talking with parents and friends about the Iraq than the Kosovo war. Almost half (44%) of the adolescents had either talked "quite a bit" or "much" with parents about the Iraq war, compared to 31% during the Kosovo war ($X^2(1, N = 1619) = 72.66$, $p < .001$). Regarding talking with friends the percentages were 45 and 30 respectively, with significantly more talking following the Iraq war ($X^2(1, N = 1518) = 87.07$, $p < .001$). Overall, most students did not want their parents to talk more, but significantly more

adolescents wanted their parents to talk more following the Kosovo compared to the Iraq war ($X^2(1, N = 1611) = 47.48, p < .001$). Although very few young people had wanted their parents to talk more about either war, around a quarter of them indicated that they wished their teachers had talked more about both wars. Students reported that around half the teachers had raised the war issue in class.

Almost half of the adolescents (45%) had talked much with other adolescents about the Iraq war, a significantly higher number than the 25% who answered affirmatively to this question following the Kosovo war ($X^2(1, N = 1592) = 53.46, p < .000$). Very few adolescents reported that they had questions they did not dare to ask. Around 1/6 reported that they believed that adults did not want them to know so much about what was going on. A large majority during both wars believed that adults understood how they experienced the war, and that adults were not hiding their fear from them during the conflicts. Significantly more adolescents perceived that adults really did not understand how they experienced the war during the Iraq compared to the Kosovo war ($X^2(1, N = 1591) = 5.25, p < .05$).

In summary, there was more communication about the war in Iraq compared to the Kosovo war, as predicted in hypothesis (b).

Gender differences

The samples were combined when analysing the gender differences in the perception of support and reactions. Significantly more girls than boys had talked to parents ($X^2(1, N = 1586) = 22.72, p < .001$) about the war, and more girls wished that parents had talked more about the war situation ($X^2(1, N = 1579) = 39.00, p < .001$). Significantly more girls than boys thought adults hid their fear from them ($X^2(1, N = 1589) = 25.86, p < .001$). Girls also reported that they were more anxious about what had happened lately ($X^2(1, N = 1584) = 157.23, p < .001$), more concerned that Norway would become involved in the war ($X^2(1, N = 1586) = 167.74, p < .001$), more afraid of terrorist acts in Norway ($X^2(1, N = 1584) = 101.23, p < .001$), more afraid of something happening to themselves or their family members ($X^2(1, N = 1582) = 99.04, p < .001$), and more wished there was something they could do to prevent war ($X^2(1, N = 1569) = 107.68, p < .001$). Boys reported significantly more than girls that the best one could do was to live normally and not think so much about what was happening ($X^2(1, N = 1577) = 4.97, p < .05$).

Regarding reactions girls experienced significantly more reactions than boys on all questions in Table 1 (for brevity tests are not included). Girls also had significantly higher IES-total scores (mean girls 6.67, $SD = 6.48$; mean boys 4.07, $SD = 5.59$; $t = 8.52, df = 1570, p < .001$), IES-intrusion scores (mean girls 3.97, $SD = 4.10$; mean boys 2.47, $SD = 3.64$; $t = 7.66, df = 1570, p < .001$), IES-avoidance scores (mean girls 2.70, $SD = 3.85$; mean boys 1.61, $SD = 3.13$; $t = 6.18, df = 1572, p < .001$) and IES-arousal scores (mean girls 2.77, $SD = 3.90$; mean boys 1.67, $SD = 3.06$; $t = 6.22, df = 1572, p < .001$).

In sum, girls generally reported stronger reactions than boys, as predicted by hypothesis (c).

Differences between high and low scorers

Regardless of differences between the wars, it was predicted that those adolescents who scored above cut-off on the Impact of Event Scale would be less likely to communicate about the war situation with adults and peers. Data from each war were combined, and chi squared analyses

were run comparing those who scored at least 17 on the IES with the remainder of the sample, in relation to talking to parents, talking to friends, and wanting to ask about the war but not daring to. Counter to predictions (hypothesis d), it was found that those who scored above cut-off were significantly more likely to have talked much to parents ($X^2(1, N = 1596) = 38.56, p < .001$), and more likely to have talked to their friends and peers ($X^2(1, N = 1594) = 10.16, p < .05$). However, in accordance with hypothesis (d), those who scored above cut-off were more likely to have wanted to ask about the war but did not dare to ask ($X^2(1, N = 1591) = 45.21, p < .001$).

Discussion

This study examined the effects of distant warfare on adolescents. We tested four hypotheses: a) that the Kosovo war would result in more reactions than the Iraq war; b) that adolescents and adults would communicate more following the recent 2003 Iraq war than the Kosovo war; c) that girls would evidence more reactions than boys; and d) adolescents who score above cut-off on the IES will report less communication with friends and parents. Each hypothesis received support or partial support, except hypothesis (d) where results were more mixed.

Most of the students were not very worried about the war situations, but around a third of them had fairly extensive worry and some were also worried that Norway would become involved in the conflicts and that terrorist acts would happen close to home and that something would happen to them or their loved ones. In all these matters significantly more students harboured these fears during the Kosovo war than the Iraq war, thus supporting hypothesis (a). It is reasonable to think that this reflects more proximity to the conflict in Kosovo and that fears are more easily activated when there is less distance to the conflict. The media attention to previous wars in former Yugoslavia, the influx of refugees from the area, and the fact that many Norwegians have served in peace-keeping missions in the area may have made it easier to instigate fear during this conflict. An alternate hypothesis is that the more limited communication with friends, parents and teachers left them more alone to handle their fears during the Kosovo war.

The proximity to the Kosovo war or their increased fear may also explain why more students wanted to be able to do more to prevent war during this conflict. More than 2/3 in both conflicts wished there was more that they could do in this regard, a finding that should perhaps be taken as a challenge to adults to help the students channel this wish to contribute in an active manner so as to counteract feelings of helplessness. The fact that students during the Iraq war significantly more often than students during the Kosovo war acknowledged that the best one could do was to live normally and not think so much about what was happening may likewise reflect more initiative being triggered by the Kosovo situation.

Few students had strong, broad emotional reactions to either of the two wars, with the mean scores falling between the categories "no" and "a little". These results indicate that although there was extensive reporting of these two wars and their human consequences, adolescents are quite resilient and only a few of them evidence strong reactions. Of course, this may also reflect a media "fatigue" following media's massive coverage of wars and disasters over the last 15 years. However, their eagerness to be able to do something makes it less plausible that the low number of adolescents that report emotional reactions result from overexposure to tragic news. Resiliency in children has been referred to as "a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development" (Masten, 2001, p. 228).

Although these wars may not pose a serious challenge to their development, a majority of adolescents experienced becoming anxious about what happened and had some fear that Norway would become involved. Still very few evidenced emotional reactions to a major extent, reflecting resilience and an ability to emotionally regulate what happened.

Only anger at those responsible was evidenced by many of the adolescents, though more than 10% of them acknowledged with some intensity that they held a gloomier outlook towards the future, and that they expected something else terrible to happen. If all adolescents attesting to some level of gloominess toward the future are included, it amounts to 40%. It is known (Terr, 1983) that dramatic events can create changes in the direction of more pessimism toward the future. The threat of nuclear war has also been associated with a similar feeling of pessimism (Escalona, 1982). Naturally, children and adolescents living in war-torn countries evidence even more of this pessimism than the adolescents in this study (Dyregrov, Gjested and Raundalen, 2002; Dyregrov and Raundalen, 2003). Although few in this study report this pessimism to any large extent, it is a cause for concern and we should strive towards a better understanding of how adverse world events influence adolescents' development of safety and prospects for the future.

Over 20% also perceived that they held their loved ones in higher regard, reflecting an often found "beneficial" consequence of exposure to adverse life events most often studied in adults but also reported in children (Eiser, Hill and Vance, 2000). Crisis situations can trigger a re-evaluation and re-ordering of life priorities with a higher emphasis of non-material values, a higher appreciation of life and especially the relationships to one's friends and loved ones. This can be viewed as an adaptive coping response to threat, but can for some adolescents lead to more dependence on adults in a life phase characterized by a greater need for autonomy.

Although there were no differences between the Kosovo and Iraq groups on most reactions (cf. Table 1) the significant differences were in the predicted direction with more reactions during the Kosovo war, thus providing partial support for hypothesis (a). The explanations previously presented are believed to explain these reaction differences.

The Impact of Event Scale scores reflect low levels of arousal and somewhat higher levels of intrusion and avoidance. Only a small number (Iraq 6%, Kosovo 6%) reach a level associated with PTSD. Students during the Iraq compared to the Kosovo war had significantly higher intrusion, arousal and total scores, a fact apparently in contradiction with the findings supporting hypothesis (a). Thus we find that although students during the Kosovo war had more fear about the conflict and its possible consequences in Norway, also evidencing more anxiety, and gloom about the future, the IES scores are higher during the Iraq war. The IES taps specific traumatic reactions, while the other questions more reflect general anxiety and specific fear. As mentioned previously, the TV coverage of the Iraq war brought more vivid coverage of the dead and injured than the Kosovo coverage. We suspect that this explains the higher IES scores during the Iraq war.

Communication about the Iraq war was more widespread than for the Kosovo war both among adolescents and with their parents. Adolescents also felt that teachers gave too little attention to talking about the wars in the schools. At the same time, adolescents during the Kosovo war were more afraid of the conflict affecting them in Norway and reported more anxiety, a greater need to be with close ones, and more pessimism regarding the future than adolescents during the Iraq war. Girls evidenced more reactions than boys.

Most of the adolescents got their information about the war from the media, primarily television. Norwegian television broadcast live, especially during the Iraq war. In addition, many

Norwegian families accessed CNN, BBC and other television channels through cable or satellite. This adds a closeness and directness to the war. Whilst the amount of film footage of the actual bombing was less during the Kosovo war, the focus on the refugee situation and thus the human suffering was stronger. Following television, the next major source of information was newspapers. Parents, the school and friends were not viewed as very important sources of information about the war.

The adolescents reported having talked significantly more among themselves, with parents and with friends during the Iraq war than the Kosovo war. It is therefore no surprise that adolescents during the Kosovo war had significantly higher wishes for their parents to have talked more than during the Iraq war. It is, however, intriguing that adolescents during the Iraq conflict stated significantly more often that adults did not really understand how they experienced the war. More than a quarter of the adolescents perceived this lack of understanding. Although the results provided support for hypothesis (b), some of the communication variables showed no difference between the answers following the two war situations.

Adolescents report a more open communicative climate during the Iraq war than the Kosovo war. One explanation could be that mental health professionals over the last few years have used the media to convey the message that it is important for parents and teachers to talk to, inform and reassure their children about the war, in order for them not to be left alone with the strong media images and resulting thoughts. If this is the case, the message still has to reach many of the teachers, as a majority of students had wanted their teachers to talk more. However, it could also be that the two wars had a different impact on the adolescents, leading to a different need for communication and reassurance. To some extent, it is conspicuous that the Kosovo war, with its proximity to Norway and with the enormous refugee crisis it created, was discussed less. It may have hit too close to home and they may have regulated their distress by avoiding the topic, as the reversed direction of the scores on the avoidance subscale of the Impact of Event Scale indicated. While adolescents evidenced more intrusion and arousal during the Iraq war, the avoidance scores were highest during the Kosovo war. It could also be that the Kosovo war came on top of all the war stories from former Yugoslavia that had been part of these adolescents' formative years during the nineties, resulting in a kind of war fatigue. Initiating communication and providing reassurance for children and adolescents is an adult responsibility, where adults must convey a wish for and readiness to discuss the situation with their offspring or reassure them that they need have no fear of the war spreading to Norway. At the same time such conversations demand willingness on the adolescents' side, and there are few of them expressing a wish for more conversation from parents.

Around 90% of the teachers had raised the subject at school, but not enough according to the students. A majority had wanted them to talk more about the subject. The results convey a message that students at this level do not feel that the schools have met their level of expectations regarding information and communication on these serious war situations.

A large subgroup (around 25%) sense that adults hide their fear from them and that adults do not quite know how to talk with them about the war, while almost a fifth perceive that adults do not want them to know so much about what is happening. It is known from other crisis situations (Burke, Borus, Burns and Millstein, 1982; Handford, Mattison, Humphrey and McLaughlin, 1986; Kinzie, Sack, Angell, Manson and Rath, 1986) that adults often shield their children from facts and limit their conversations. However, adolescents in this study do not harbour unasked questions. Interestingly, it is during the Iraq war rather than the Kosovo

war that significantly more adolescents perceive less understanding from adults. This is also the war where they talked most with parents (and friends). We may speculate that it is during these conversations that they got the feeling that adults do not understand fully how they experience the war.

Significantly more girls than boys had talked with their parents and friends during the two wars and yet girls more than boys wished that parents had talked more. It is a common finding that girls confide in and talk more with both parents and best friends in general (Papini, Farmer, Clark, Micka and Barnett, 1990) and following crisis or loss situations (Dyregrov, Matthiesen, Kristoffersen and Mitchell, 1994). While girls and women tend to confide in others and talk about their reactions to adverse events, boys and men choose more private strategies (i.e. see Cook, 1988; Doka and Martin, 2001). It is illustrative that the only question where significantly more boys than girls acknowledged a reaction to be true for them was the feeling that the best thing that one could do was to live normally and not think so much about what was happening. Girls also thought that adults hid their fear from them more so than boys. Girls have been shown to have a gradual age-related increase in their confiding in friends, while boys do not show the same development (Buhrmester and Furmann, 1987). This may be because boys gradually learn to suppress their emotional reactions. Even though our knowledge about the gender development of caring for others is limited, it is known from research among adults that females are likely to experience more concern over others' distress than males (Trost, Collins and Embree, 1994), and it is a consistent finding that women have relatively high levels of dispositional empathy in comparison to men (Eisenberg and Lennin, 1983), and therefore may experience more "closeness" to those affected by the wars. If we suppose that these differences already exist in adolescence, girls' broader caring capacity may explain why they are emotionally more upset about what takes place during the two war situations featured in this study. It should also be mentioned that modern warfare affects civilians, that is women and children, to a larger extent than before.

Regarding getting upset by the war, girls reported significantly more anxiety in all respects than boys, including the fear that the conflict would spill over into Norway and affect themselves and their loved ones. Also regarding various reactions, girls scored significantly higher than boys, including both the subscales and the total scores on the IES. Hypothesis (c) is thus supported. This is a finding parallel to that found for children and adolescents living in Iraq right before the outbreak of the Iraq war (Dyregrov and Raundalen, 2003) and what has been found for children living in war torn countries (Dyregrov, Gupta, Gjestad and Mukanoheli, 2000; Kuterovac, Dyregrov and Stuvland, 1994; Ronen, Rahav and Rosenbaum, 2003). It adds to the understanding of girls being more sensitive to threatening stimuli than boys (Johnson, 1982; Magnusson, 1982).

Contrary to our expectations, adolescents who scored above the cut-off on the Impact of Event Scale had talked more with their parents and friends than those below the cut-off level. This paradoxical finding should also alert us to the fact that confiding in itself may not be enough to lower reactions, at least not in the short run. More trauma-specific help may be needed for those who evidence scores above the cut-off level, in line with findings in the literature on treatment of PTSD in children and adolescents (see Dyregrov and Yule, in press for a review). Although at first very intriguing, the finding may reflect that those that evidence much reactions on the Impact of Event Scale seek out others to talk to or confide in. Although they report more talking with others, those scoring above the cut-off still harbour more questions that they have not dared ask.

This study used a single questionnaire administered as part of a cross-sectional study among adolescents and mostly relies on non-standardized, non-validated measures (except the IES). Although the response rate was excellent, no interviews were used and the samples were not matched so the differences between the two wars may not result from the psychological proximity to Kosovo but from factors such as coming from different schools, in different cities, at different times. The study must be regarded as an exploratory study in an area lacking systematic research. It is our hope that it can stimulate other research to better understand how conflict and war in the media age influence children and adolescents distant from the actual warfare.

Conclusion

It would be an overstatement to say that the two wars caused strong anxiety or other intense reactions in Norwegian adolescents. It is, however, obvious that most of the adolescents to some degree were affected by the distant conflicts, mostly to a mild degree, with a small group becoming very much upset about what was going on. Norway's physical proximity to Kosovo seems to have created a closer "psychological distance", resulting in more anxiety and fear concerning this than the Iraq war. It is intriguing that though the distance to Kosovo is less and the reactions to this conflict were stronger, the communication with friends and parents was less during this conflict. This may reflect an ongoing societal move toward a more open attitude to addressing difficult subjects at home and in school over time, or the fact that talking is paralleled by a drop in reactions (except the more specific IES reactions). Adolescents discuss ongoing wars both among themselves and with adults and it is important to develop good strategies in the classroom to handle such matters, as well as informing parents on ways that they can discuss the issue at home. When we read the description of the adolescents' understanding of the wars we find that there often is a person-focused demonized explanation of conflicts, where they have easy solutions to the war (i.e. kill Milosevic). By discussing and reflecting together with adolescents they can get a less superficial understanding and keep their empathy for people suffering on both sides of conflicts.

Practitioners within the field of behavioural and cognitive psychotherapy can play a part in disseminating information in this field to parents, professionals, media and policy makers. In particular, parents should be made aware of the importance of understanding what their children take in and understand when major wars and disasters make breaking news. By entering in conversations with their offspring parents can help them understand the nature, extent and context of the situation and support their resilience. Professionals can offer support and advice to parents and teachers on how to handle the communication about major world crises, as well as advising major media on the consequences of their use of graphic detail. Mental health and media professionals can develop guidelines for reporting to and informing children and adolescents, and for informing parents about precautions to be taken (i.e. on websites) against repeated exposure to graphic detail. Policy makers can be made aware of how modern media may impact on the public's mental health, both young and old, as well as ensuring that awareness of such issues becomes a priority and part of the school curriculum. Professionals can take an active role in helping schools develop plans for handling major media events such as wars and disasters (cf. the recent tsunami), in order for teachers to meet children and adolescents in a prepared, systematic and constructive manner.

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