A Virtual Safe Zone: Teachers Supporting Teenage Student Resilience through Social

Media in Times of War

Hananel Rosenberg\*, Yaakov Ophir & Christa S. C. Asterhan

Paper in press for Teaching and Teacher Education

2018

\* Corresponding author. Department of Communication, Ariel University, 40700,

Israel. Email: hananelro@gmail.com

This study was conducted with the financial support of the Institute for the Study of New Media, Politics and Society at Ariel University and the German-Israeli Foundation (grant 116.105.4/2010).

#### **Abstract**

We examine how teacher-student communication through social network technologies may support student resilience during an ongoing war (i.e., the 2014 Israel-Gaza war). Based on student responses from open-ended surveys (N = 68), five content categories of emotional support were identified: caring, reassuring, emotion sharing, belonging, and distracting. The mere existence of continuous online contact with teachers also contributed to resilience perceptions. Interviews with 11 secondary school teachers revealed three main purposes for this communication: (a) delivering emotional support to students, (b) monitoring their distress; and (c) maintaining civilized norms of discourse. Practical implications and theoretical contributions are discussed.

Keywords: social network technology (SNT), teachers, teenagers, emotional support, resilience

"When the storm of fear broke, the teacher was quick to respond to each one of us... I felt that she cared about me on a personal level - not just as a teacher" (15 years old boy, Sderot, South of Israel, 2014)

School-based trauma intervention programs often include teacher training to support student resilience, that is: their ability to maintain stable levels of psychological and behavioral functioning in the face of disruptive or life-threatening situations (Baum, 2005; Bonanno, Galea, Bucciarelli, & Vlahov, 2007). According to contemporary social-ecological approaches, a person's resilience is not simply determined by a set of given, static individual characteristics. Rather, it depends on the capacity of multiple dynamic systems, including micro systems (e.g., the individual's psychological capacities) as well as broader social environments (e.g., family, peer group, and school; Ungar, Ghazinour, & Richter, 2013), to adapt successfully to disturbances that threaten the systems' function, viability, or development (Masten, 2014). Research on resilience has identified a number of protective factors that moderate the negative impact of traumatic events (Baum, 2005; Masten, 2014). For example, based on a comprehensive review of studies that explored the effects of war on children around the world, Werner (2012) identified the following protective factors: strong bonds between the primary caregiver and the child, a shared sense of values, and the social support of teachers and peers. In the current study, we focus on the latter: the role of teachers and of teacher social support in times of warfare.

Teacher-delivered, classroom-based intervention programs have been shown to effectively reduce negative reactions and strengthen student resilience in the face of traumatic events and have been identified as a viable and cost-effective alternative to individual or group therapy (e.g., Berger, Pat-Horenczyk, & Gelkopf, 2007; Werner, 2012; Wolmer, Hamiel, Barchas, Slone, & Laor, 2011). As teachers have everyday,

ongoing contact and relations with the children and teenagers in their care, they are in a unique position to support student resilience building efforts. They may suggest coping strategies (e.g., distraction from traumatic events and related thoughts), assist with emotional processing, and help students maintain their familiar roles and routines (Prinstein, LaGreca, Vernberg, & Silverman, 1996). Moreover, research shows that, beyond specific therapeutic techniques, greater strength of and accessibility to human relationships in times of security threats improves individual ability to cope with trauma and recover from it (Coates, 2003; Cohen, 2008). Finally, by strengthening connections with their students, teachers may also increase students' sense of 'school connectedness', an emotional bonding with teachers and peers (Goodenow, 1993). School connectedness, in turn, may lead to better adjustment and improved resilience (Moscardino, Scrimin, Capello, & Altoè, 2014; Werner, 2012).

However, during ongoing wars and in areas of intensive warfare, access to school premises is limited, as teachers and students are obliged to remain close to bomb shelters for security and safety reasons. Maintaining face-to-face teacher-student contact is often not an option in those circumstances. The question then arises: How can teachers support student resilience in active war zones and during an active, continuous war when schools are closed? In the current work, we report on spontaneous teacher initiatives to initiate and maintain teacher-student contact through ubiquitous social media communication technologies, as an alternative pathway.

# Students, teachers and social media technologies

The enormous popularity of social network technologies (SNTs) such as Facebook and WhatsApp among youth and adolescents (Brenner, 2012) has brought many secondary school teachers to use them as easily accessible, available and usable

channels of communication with their students (Andersson, Hatakka, Grönlund, & Wiklund, 2014; Asterhan, & Bouton, 2017; Asterhan & Rosenberg, 2015; Rosenberg & Asterhan, 2017). Even though communication through these channels is not without limitations (e.g., Asterhan & Rosenberg, 2015; Hershkovitz & Forkosh-Baruch, 2013), SNT communication is leveraged by teachers, not only for organizational and didactical purposes, but also for psychosocial purposes (Asterhan & Rosenberg, 2015). Adolescent students use SNTs for emotion and distress sharing (Ophir, 2017, Ophir, Asterhan, & Schwarz, 2017) and teachers have been documented to use SNTs, such as Facebook, to unobtrusively monitor their students' well-being, intervene to prevent negative social interactions such as cyber-bullying, and use SNT communication to reach out to specific students in need (Asterhan & Rosenberg, 2015).

Reaching out to students in need occurs not only during the school year, but also when teachers recognize that their students might experience prolonged psychological stress. During the 2014 Israel-Gaza war, which took place during the school summer recess, it was estimated that more than half of Israeli adolescents who lived in war-afflicted areas communicated with their teachers via WhatsApp and Facebook (Ophir, Rosenberg, Asterhan, & Schwarz, 2016). Research in the general population showed that SNTs were the dominant communication channels during the Israel-Gaza war, and this communication was perceived by users as having a calming influence (Malka, Ariel, Avidar, & Hen-Levi, 2015).

These findings complement documented advantages of SNTs as efficient communication channels for exchanging live information during times of disaster and crisis (Palen, Vieweg, Liu, & Hughes, 2009). The ubiquitous availability of SNTs

contributes to efficient coordination of response and even recovery efforts in times of large-scale disasters (Liu, Palen, Sutton, Hughes, & Vieweg, 2008).

### The present study

Despite these documented advantages of SNT communication during times of crisis, and the fact that teachers were found to be using this channel to communicate with their students in times of war, little is known about how this SNT-mediated contact strengthens students' emotional state and resilience. In light of the fact that exposure to war-related stress endangers children's healthy psychological development (Davis & Siegel, 2000), an open channel of SNT-based communication between teachers and students may be a significant contributor to adolescents' mental health. In a previous survey study, we have documented the existence of teacherstudent SNT-based contact during the Israel-Gaza war and reported that students both appreciate this form of communication as well as believe it helps them cope with the war-related agony and stress (Ophir et al., 2016). The goal of the current study is to further investigate the content of this communication and how both students and teachers perceive its benefits and limitations. Thus, we inquire about the 'active ingredients', the specific components of teachers' SNT-based interventions, in order to better understand how they may eventually contribute to students' subjective feelings of resilience.

For this purpose, we examined both teachers' and students' points of view on SNT communication during an active, ongoing war (i.e., the 2014, Israel-Gaza war). We focused on Israeli teachers and secondary school students who live within 45 kilometers from the Israel-Gaza border (e.g., the cities of Sderot, Be'er-Sheva, or Ofakim). Among Israeli civilians, this area was exposed to war-related events most. For two consecutive months, cities in this area were hit by approximately 4,500

rockets and civilians had very limited time to find shelter (15-90 sec, depending on the exact distance from the Gaza border).

From the students' point of view, we inquired how SNT communication with their teachers helped them during the war, using 'real' examples and stories. From the teachers' point of view, we inquired whether and how teachers leveraged SNT communication to try and create feelings of resilience among their students? What were their attitudes towards SNT usage with their students and what might be the benefits as well as the shortcomings of SNT communication in times of war?

#### Method

The data for this study were collected during an active, ongoing war. In order not to miss the time limited window for data collection, on the one hand, but to ensure rich data of sufficient quality, while taking into consideration both security issues and ethical limitations, two different data collection strategies were combined: Online open-ended survey questions and semi-structured, one-on-one interviews.

### Participants and data collection procedure

The data for the current study was collected during the 7th and 8th weeks into the 2014 Israel-Gaza war (August, 2014). All participants were Israeli citizens who reside within 45 km from the Israel-Gaza border. Participation was voluntary. Two separate data sets were collected from teachers and from students, using different procedures.

**Teacher data collection.** Semi-structured interviews were conducted with 11 secondary school teachers (7 female). In-depth interviews were deemed the best option to shed light on this topic and to provide a deeper insight into the respondents' experiences, feelings and attitude (Coombes, Allen, Humphrey & Neale, 2009). A detailed description of the research topic was provided to the teachers, both in written

and in oral form, to ensure their informed consent. Teachers were recruited using a "snowball sampling" process, through personal acquaintance (colleagues and inservice teachers who graduated from a leading formal educational training institute). Twenty-five potential teachers who used SNT communication with their students were contacted by the authors, out of which, a total of 11 teachers were interviewed. The selection of these 11 teachers has been decided based on purposive sampling methods (Patton, 1990) and within the aforementioned research limitations, while maintaining a variety of teacher ages, seniority and educational roles. Teachers could choose to leave the interview at any time. The final sample, although not strictly statistically representative, reflects a variety of experiences and backgrounds and presents "a unified vision of the essences of a phenomenon or experience" (Moustakas 1994, p. 59).

Eight interviews were conducted until a data saturation was reached, and no more new themes emerged (Guest, Bunce, & Johnson, 2006). Three more interviews were conducted to achieve a balance of age, gender, and seniority, based on the assumption that these variables may be relevant to social network usage patterns, especially with regard to communication practices with students and the legitimacy of using social networks for contact with students (Hershkovitz & Forkosh-Baruch, 2013; Forkosh-Baruch, Hershkovitz & Ang, 2015).

As the residential areas of the participating teachers were under constant fire, travel from, to and within the afflicted area was restricted and the interviews were, therefore, conducted by telephone, rather than face-to-face. The interviews lasted between 45 and 90 *min* and were conducted by the first author and trained research assistants. Interviewees were asked to describe their SNT usage practices, motives,

content, and challenges of their online communication with their students, during the war.

The verbal content of the interviews was transcribed and analyzed, using a thematic analysis method (Berger, 2010). This method identifies and maps major themes arising from the data according to the (aforementioned) research questions (Gaskell, 2000). The bottom-up categorization process (Strauss & Corbin, 1990) comprised of four stages (Marshall & Rossman, 2014): (a) organization of research material; (b) creation of categories; (c) examination of possible preliminary assumptions; and (d) search for alternative explanations. Teacher quotations are presented with information on a person's age, gender and professional position in school.

Student data collection. A total of 113 adolescent students were recruited from a national panel of adolescents in Israel. In addition to the selection criterion of residential area and mother tongue (Hebrew), only teenagers who had active SNT communication with their teachers at the time were approached for this study. The research center managing the survey panel is subjected to state privacy law and ethic norms. Registration to the panel requires reading and signing a consent form, as well as a parental consent forms for minors. Students could choose to cease their participation at any time. In light of the sensitivity of the subject of research, students were not asked to share their personal (hidden) fears. They were specifically directed to address their perceptions on their communication with their teachers only. Students' biographical information from the panel data company was used to build a representative sample for gender, age, and religious sectors.

After having completed a set of closed questions on the quantitative aspects of teacher-student SNT communication during the war (Ophir et al., 2016), we asked

adolescents to elaborate and write in their own words whether and how SNT communication with their teachers helped them during the war. The adolescents were encouraged to provide genuine answers and use vivid examples for illustration. Adolescents who did not complete this open-ended section, who replied with three or less words (e.g., "it just helped"), and whose replies were incomprehensible, were omitted from the data set. Six respondents explicitly expressed their opposition to teacher-student SNT communication. These responses are discussed below, but they were omitted from the quantification process, because they do not provide information about the 'active ingredients' of emotional support during the war. Altogether, the final data set included 68 textual responses from 68 adolescents (48 female) between 13-18 yrs old (M=15.6, SD=1.5). Student quotations are presented with information on a person's age and gender.

In order to determine which categories were most dominant in students' responses, a verbal data quantification process was applied (Chi, 1997): Two researchers read all responses several times and marked notable, recurring themes, which were then discussed and compared. This resulted in six distinct content categories which were then formally defined. Finally, two independent judges rated each student response using this six category coding scheme with a dichotomous scale (0 = the response does not include a reference to the category, 1 = the response includes reference to the category). The level of agreement between the two raters was substantial (*Cohen*  $\kappa = .771$ , p < .001). Discrepancies between the two raters were discussed and given a final score by the authors.

#### **Results**

The results from the student and the teacher perspectives are presented in separate sections, as they were collected in separate data collection waves and with different methods.

### Student perspectives on SNT communication with their teachers

Five of the 6 categories for coding student perspectives on how SNT-mediated teacher contact aided them during the war were related to themes of emotional support: Caring, reassuring, emotional sharing, belonging, and distracting. The sixth category did not relate directly to emotional support, but to pedagogical content. Full descriptions, vivid examples, and frequencies of the different coding categories are provided in the next section as well as in Table 1.

As shown in Table 1, the most dominant category in students' written answers was Caring (40.3%), that is: the perception that their teachers care for their emotional state during the war and express sincere interest in them. Some students emphasized that this act of caring is especially appreciated because it "breaks" the usual barriers of student-teacher relationships, that often times revolves around "studying and grades". From the students' point of view, SNT contact with their teachers conveyed an authentic expression of concern. One participant wrote that "even though schools were closed, I felt that she (the teacher) cared about me on a personal level and not just as a teacher" (F, 14).

Teachers who were familiar with their students' personal history could specify and direct their SNT communication, as one participant wrote: "My teacher knew that during the previous war [the 2008 Gaza-Israel war, red], I was traumatized and now, she was so caring during the entire war. Her honest concerns made me very happy" (F, 16). A number of the students described specific situations whereby teachers expressed interest and contacted students in need: "My teacher showed special interest

in my friend's well-being. She knew that my friend's sister was getting married and that her family was worried that the wedding would be cancelled. This caring helped her during this period of stress" (F, 15).

The second dominant category was Reassuring (29.9%), which refers to the teachers sending students reassuring messages and to the perception that teacher-student communication installed a sense of calm, reassurance and relief. One student admitted that his teacher: "helped relieve stress and fear and generated a sense of support" (M, 14). Another student reported that: "the homeroom teacher was very supportive and left an impression that there is someone you can trust and rely on" (F, 15). Apparently, the immediacy and accessibility of SNT-based communication through cellular phones allowed teachers to synchronize their reassuring messages directly with live war-related events. Such messages were usually conveyed following rocket fire or scary, negative media reports from the battlefield.

Students also perceived the online interaction with their teachers as a platform for Emotional sharing (10.4%). Students reported that their teachers were available figures with whom they could unload their fears and share their distress. Others emphasized that the ongoing contact with their teachers created a sense of Belonging (10.4%) and partnership whereby students could identify with their peers and teachers. The occurrence of both these categories is evident in the following student quote: "One of the teachers recognized the stress in our group, so she shared her own feelings. This led to an emotional conversation in which we felt that we are all in the same boat" (F, 17). At times, the identification and partnership experiences originated in the adolescents' peer group. Students described experiences whereby friends' messages in the SNT-based classroom groups provided them a feeling of

'togetherness'. As one student said: "I'm not the only one dealing with this terrible situation" (M, 15).

A few students (6.0%) also indicated that entertainment or war-unrelated content, which were discussed on their SNT groups, had a positive effect on them. According to this theme, SNT conversations served as a distraction from negative experiences, which helped them cope by taking their minds of the stressful events (Category #5). Finally, a few students (3%) also reported that some SNT communication focused on academic tasks and appreciated the fact that it occurred during the summer break. It is possible that maintaining an academic routine contributed to students' emotional stability, but these responses were very rare.

The mere existence of teacher-student contact. During the content analysis process, we noticed that students did not only refer to the content of their communication with teachers, but also to the mere existence of this communication. Accordingly, teachers' emotional support was expressed in two layers: An explicit layer, through the content of the message (e.g., "I am concerned about you"), and an implicit layer, through the mere existence of the contact, regardless of the content. This finding has been repeatedly demonstrated in almost all six categories, but was especially prevalent in support content categories Reassuring and Caring. In all, 27 students (40%) mentioned that the contact itself added to their subjective feelings of security. Some students attributed this feeling to the fact that the two-month, long war occurred during the summer break and that their teachers communicated with them "even though they didn't really have to" (M, 14). This, according to some students, indicated genuine caring. Moreover, the existence of this open hot-line during the war was experienced by some students as if they are meeting the "person behind the

teacher", rather than just his or her formal facade. Below are some citations from the student responses:

"I felt that the teacher really cared about me, and that even though she didn't have to, she did it full-heartedly" (M, 14).

"My teacher wrote that she was here for us and it was nice to know and feel that there is someone there for you and that the teacher is going beyond her formal position as 'just a teacher'. The fact that she cared about us showed us that she's not one of those teachers who come only to teach, she dedicates her time to the students, especially in tough situations, and it's an amazing feeling. She has characteristics that not many teachers have" (F, 14).

"The teachers were very interested in us. That was so encouraging, that they cared, that something exists beyond school hours and exams" (M, 15).

"It was nice to know that the teacher cared about us during the war. It raised my sense of security" (F, 13).

Students' resistance to SNT communication with teachers. Six students (8.8%) raised principled objections to online contact with their teachers. For them, communicating with teachers outside of the academic, school-work related framework was perceived as a border that should not be crossed. One student responded: "Why should I speak with teachers during summer vacation? Don't I have a life?" (M, 17). Another student wrote: "I would never speak to a teacher outside of school. Sorry but school is enough, I don't need to see my teachers after school hours" (F, 16).

Another student claimed that his teachers are not "genuinely" interested in the students' well-being and that they only engage in this communication because it is part of their duty: "[the contact] didn't help, quite hypocritical, truth be told. The

teacher would write 'Hi, how are you? I hope you're okay.' I mean, it wasn't personal, the teacher's interest in us was just a means to start a conversation" (F, 17).

Other students rejected the communication with their teachers because "it invaded their territory". This breaking of boundaries was evident in the spatial sphere (the felling that teachers don't really belong in social media), in the temporal sphere (the teachers are not allowed to penetrate to their summer vacation), and in the psychological sphere ("The teacher is a teacher and he can't help you as if he was your friend or family" [F, 17]).

## Teachers' motives for SNT communication with students during the war

The analysis of the teacher interview protocols yielded three distinct teacher motives and uses of SNT-based communication with their students during the war: (1) emotional support; (2) monitoring distress; and (3) maintaining respectful and ethical discourse. The three themes are presented and illustrated below.

**Emotional support.** In accordance with the students' view, teachers' first motive to use SNT during the war was to provide emotional support to their student in the absence of face-to-face relationships in the classroom. According to the teachers, the SNTs enabled continuous, two-way communication media. Teachers felt that they could improve student morale and provide psychological support in an immediate, unobstructed way. This included sending calming messages and prayers, which were sent following scary or negative war-related news items (e.g., about a fallen soldier, or a threat of invasion). Yaniv (M, 39 *yrs*), who is a 9<sup>th &</sup> 10<sup>th</sup> grade teacher, depicted this in his own words:

"Last Friday, after we heard about Hadar Goldin [an IDF lieutenant who was captured and killed in a combat tunnel, red], I sent the students a unique prayer by Rabbi Nachman to inspire them... to strengthen their spirits".

Teachers stated that the students prefer this method of communication, as well, as it allows uninhibited and unrestrained contact:

"One of the students sent me pictures from the funeral of one of the students' brother. He knew I wasn't in the area and therefore not at the funeral and it was important for him to update me" (Sivan, F, 40, Teacher and vice-principle).

Interestingly, online emotional support was found to be a "two-way road". Some teachers reported that the students were the ones to express their concerns towards the teacher. One teacher provided a humorous imitation of his student who wrote: "OMG, sir, are you ok? I have just heard Sderot was hit by a BUNCH of rockets!" Teachers offered four reasons for why they believed this "reversed" emotional support to be important and significant: (1) it showed a genuine concern for teachers, as an internalization of the educational golden rule of reciprocity (treating others as one would wish to be treated); (2) concerning for others may decrease students' own fears; (3) these expressions of concern strengthen the mutual connection between teachers and students; and (4) teachers actually felt emotionally supported by their students' concerns. This latter point is nicely illustrated in the next quote:

"It was always a mutual conversation... they [the students] asked me a lot of supportive questions. Teacher, what about you? You're here but your husband was recruited for active reserve duty, you have two small children, and you're about to give birth, so how are you getting along, what do you need, do you want us to come help you, to watch your children? This communication was so meaningful at that time, their interest and caring, so many girls offered their help... every time there was a battle, students would message me. What's your husband name? We'll pray for him. Their caring really warmed my heart. Even though I

am their teacher, this has really, really strengthened me" (Sarit, F, 30, 12<sup>th</sup> grade teacher).

Monitoring distress. Teachers' second motive for maintaining SNT contact with their students was to monitor their students' levels of distress during the war. This motive is more relevant to Facebook, rather than to WhatsApp-based communication, because Facebook allows a wider perspective into the social and personal life of the student. Nevertheless, monitoring for distress was mentioned even in WhatsApp communication: "One girl has sent a shaky voice message to the class WhatsApp group that a rocket fell right near her house. She was crying and trembling" (Yaniv, M, 39, 9<sup>th &</sup> 10<sup>th</sup> grade teacher). Interestingly, teachers indicated that that online monitoring distress did not necessarily lead to online psychosocial interventions. Instead, most declared that they preferred to intervene through more traditional communication channels, such as telephone or face-to-face:

"After her [the abovementioned girl, red] stressful message, the students comforted her and shared similar stories. I truly believed that this conversation was important and helpful. Yet, I did feel the need to give her a call later that night, to check on her and to see how she's doing" (Yaniv).

Some teachers interpreted their students' silence in the online sphere as a sign of emotional difficulties:

"Most of the kids poured out their guts and emotions on WhatsApp. It was all there: fears, anxieties, coping strategies, even understandable longings to restore the summer break, to sunbath at the beach or to swim in the pool. It was therefore evident that those students, who choose not to participate in the online conversations, are having difficulties in

emotional sharing. So I have initiated phone calls, to contact them personally" (Rachel, 44, 11<sup>th</sup> homeroom teacher).

Maintaining norms of discourse. Teachers' third motive for SNT communication with their students was to maintain a civilized online discourse. They chose to intervene in conversations that became radicalized or disrespectful. Teachers were aware of the expected radicalization in times of war and adopted an educative role to monitor radicalization and to reduce extreme statements: "One time I witnessed an unpleasant conversation, which included swear words. I demanded from my students to stop this form of communication and to respect each other's opinion. They actually stopped, or perhaps they just opened a new group and excluded me" (Tami, F, 40, 9<sup>th</sup> grade teacher).

The second part of Tami's quote reflects one of the teachers' dilemmas. On the one hand, like Tami, many teachers reported that they felt the need to interrupt students who used racist phrases or expressed themselves in uncivilized, aggressive manners. On the other hand, teachers expressed their fear that, these types of interventions will cause antagonism among the students, which will ultimately affect their students' attitudes towards their presence in social media. To resolve the dilemma, some teachers chose not to target the problematic conversations, but to intervene in a more implicit manner: "I have tried to shift the discussion to subjects, which were more crucial, and more consensual, such as praying for our soldiers" (Calanit, F, 37, 10<sup>th</sup> homeroom teacher).

Teachers were concerned with the question of where do they draw the line of freedom of speech: "One conversation contained degrading comments about political leaders. It was a dilemma. Eventually, I decided not to act on it. Only when conversations crossed principle, core democratic values, I insisted that they will keep

a humanistic approach and will not violate human dignity" (Sivan, F, 40, Teacher and vice-principle).

Teachers' efforts to maintain dignified norms of SNT conversations reverberated also in the students' answers: "There were those who said we need to kill them all. The teacher immediately got involved and lowered the flames. It helped me personally - that the teacher ended that discussion. It was really ugly" (M, 15).

### **Teacher perspectives on the limitations of SNT communication**

Although emphasizing the psychosocial potential, teachers also discussed the limitations of SNT-based communication with students. SNT communication was compared with more traditional channels of communication (i.e., phone calls, emails). One teacher for instance, was worried that the public, group-based communication in SNT would come at the expense of one-on-one and more direct forms of communication:

"I actually feel bad that I didn't call. I feel that we allow ourselves to give up on oral conversations. In the previous class I was home-room teacher of, I didn't have WhatsApp, so I wasn't going to start sending everyone group SMSs. Instead, I made personal phone calls. You cannot compare a direct phone call to WhatsApp messages. As a teacher, I think I should have called" (Sarit, F, 30, 12<sup>th</sup> grade teacher).

Similarly, teachers raised concerns that SNT communication would cause a loss of subtle non-verbal nuances that are necessary for the detection of their students' distress:

"The picture is not ideal, specifically if you really want to know how your students are doing. Students can easily avoid emotional disclosure on WhatsApp. Most of chances are that students will send a message that

they are fine, even if they are not. A phone call can reveal hidden emotions. In a personal phone call you can actually hear between the lines" (Iska, F, 27, 10<sup>th</sup> homeroom teacher).

#### **Discussion**

The current study was conducted in the midst of an active, ongoing war (the 2014 Israel-Gaza war) to examine the components of teacher-student SNT communication in times of crisis and how these components may have played a role in contributing to student resilience. Data was collected from the teacher, as well as from the student perspective. Together, they demonstrate how the traditional roles of teachers in trauma intervention is extended to the online sphere. Analyses of the teacher interview data revealed three main motives for engaging in SNT-based communication with their students: (a) to maintain civilized norms of online discourse in a stressful and emotional period; (b) to monitor student distress; and (c) to deliver emotional support to their students when they need it. The data from the student perspective further revealed that this emotional support was delivered and experienced in a range of different ways: By showing they cared for student wellbeing, by giving explicit reassurance, through reciprocate emotion sharing, by providing a sense of belonging and identification, and by distracting students from stressful thoughts and events. In addition to these more explicit aspects of teacher support, the present study also showed that the mere existence of continuous online contact was perceived as an important form of support in and by itself. According to students, the very existence of the online relationship brought them closer to their teachers and helped them feel more secure. Students emphasized their appreciation of teachers who communicated with them through SNTs, "even though they were not

required to do so", and even when this communication did not directly refer to warrelated discussion topics. They described these teachers as present, available, and personally interested in them.

The implications of these findings will be reviewed in correspondence to three research literatures: resilience science, the study of student-teacher interactions in the digital sphere, and the role of SNTs in times of crises:

The primary contribution of the current study is to the literature on student resilience in times of trauma and the teacher's psychosocial role in them. Official school-based trauma programs to strengthen student resilience traditionally envision the teacher's role as part of the rehabilitation process (Prinstein et al., 1996), that is: *after* the occurrence of the traumatic event (e.g., Baum, 2005, Berger et al., 2007; Wolmer et al., 2011). The current findings demonstrate that teachers spontaneously offer real-time, proactive interventions through ubiquitous SNTs *during* the occurrences of the stressful events, and without any formal guidance, program or instruction to do so. When schools were closed and while in summer recess, teachers spontaneously took to the digital sphere and sought out their students with the intention to support them and be available to them.

Interestingly, our findings, which were extracted in a bottom-up approach, align well with the existing resilience science literature on protective factors that moderate the negative impact of trauma on children's wellbeing. First, the provision of explicit, emotional support from teachers, which proved to be the main category of teacher-student SNT-based communication in the present study, has been identified as a major protective factor in the effects of warfare on children (Werner, 2012). Second, findings concerning the importance of the interaction itself, over and beyond its specific content, resonate with another well-established protective factor, namely the

existence of human connections (Coates, 2003; Cohen, 2008). Other protective factors, such as empathy, a sense of safety, social belonging, and, to some extent, religious faith (Baum, 2005; Werner, 2012), were also recurrently mentioned by both students and teachers. Taken together, we conclude that teacher-student SNT-mediated communication in times of war and other traumatic events is not only viable, but could also be a potentially effective method for supporting student resilience, by maintaining and strengthening a range of protective factors.

The second literature these findings correspond with is the growing research field of student-teacher relations and communication in online spheres, particularly in online social networks (Hershkovitz & Forkosh-Baruch, 2013; Asterhan & Rosenberg, 2015; Forkosh-Baruch et al., 2015; Ophir et al., 2016; Rosenberg & Asterhan, 2017; Kuo, Cheng, & Yang, 2017). Findings on teacher-student communication patterns in times of peace show that (some) teachers monitor specific students-in-need and provide them with emotional support through SNTs. Yet timewise, this occupies a relatively minor proportion of SNT communication with students (Asterhan & Rosenberg, 2015). Teachers predominantly use these communication channels for coordinating and organizing school life and study-related aspects of student-teacher interactions. In times of war, on the other hand, every student has in a sense become a 'student-in-need' and the psychosocial role of teacherstudent SNT communication takes prominence. As was shown here, even the teacher can become the one in need of help and emotional support. In times of prolonged crisis, teachers recognize the hardships and uncertainties their students experience and leverage social media communication channels to provide them with in-the-moment psychosocial support.

The third contribution of the present work is to the emerging literature on social media usage in times of large-scale crises. This literature has already demonstrated the advantages of real-time information sharing (Palen et al., 2009). For example, Facebook usage enabled university officials to coordinate a response to an earthquake disaster (Dabner, 2012). Flickr (a photo-sharing SNT) usage facilitated citizen journalism and information exchange in six different disasters, including the 2007 Virginia-Tech shooting (Liu et al., 2008). The current study extends previous findings (Ophir et al., 2016), demonstrating another function of social media in times of crises, namely to lend social, emotional support and strengthen teenage students' resilience. In spite of the specificity of the settings in which the present study was conducted (the 2014 Israel-Gaza war), we believe that the current findings could be relevant to teachers, school principals and policy makers around the globe. Potential implications of the current findings may include the formulation of educational guidelines for SNT usage in times of war and other crises and the incorporation of such guidelines in school-based trauma intervention programs. Aside from encouraging the mere existence of online communication with students, these guidelines may also incorporate practical means by which teacher-student SNT communication could support students' resilience in times of hardship.

### **Limitations and future directions**

The strengths of the present study are the focus on spontaneous teacher interventions using ubiquitous everyday communication tools (instead of official intervention programs), the combination of both student as well as teacher perspectives (instead of only one of these), and the collection of data during an ongoing crisis (instead of relying on less reliable, retrospective recollections). We also recognize several limitations, however: First, the mostly qualitative nature of the

study limits our ability to generalize the findings to large populations. Second, the rarity and the complexity of the study's setting (i.e., an ongoing war) pose difficulties on future replications. Finally, the lack of objective measures of adolescent' resilience prior to and following teacher interventions limits our ability to determine the actual benefits for students. Future studies should endeavor to assess the therapeutic outcomes of teacher-student SNT communication during times of crisis with objective measures.

Notwithstanding these limitations, we believe the current study demonstrates the psychosocial potential of teacher-student SNT communication in times of war. The findings are especially noteworthy in light of common warnings against the presence of adult teachers in teenagers' online social networks and official policies that restrict student-teacher social media communication (e.g., Asterhan & Rosenberg, 2015; Hershkovitz & Forkosh-Baruch, 2013). Even though it is certainly not without pitfalls, the present study highlights the potentially positive impact of teacher-student contact through these open, informal communication channels and how it may strengthen student resilience in times of crises.

## **Bibliography**

- Andersson, A., Hatakka, M., Grönlund, Å., & Wiklund, M. (2014). Reclaiming the students Coping with social media in 1:1 schools. *Learning, Media and Technology*, *39*(1), 37-52.
- Asterhan, C. S., & Rosenberg, H. (2015). The promise, reality and dilemmas of secondary school teacher–student interactions in Facebook: The teacher perspective. *Computers & Education*, 85, 134-148.
- Asterhan, C. S. C., & Bouton, E. (2017). Teenage peer-to-peer knowledge sharing through social network sites in secondary schools. *Computers & Education*, 110, 16-34.

- Baum, N. L. (2005). Building resilience: A school-based intervention for children exposed to ongoing trauma and stress. *Journal of Aggression, Maltreatment & Trauma*, 10(1-2), 487-498.
- Berger, R., Pat-Horenczyk, R., & Gelkopf, M. (2007). School-based intervention for prevention and treatment of elementary-students' terror-related distress in Israel: A quasi-randomized controlled trial. *Journal of Traumatic Stress*, 20(4), 541-551.
- Berger, A. A. (2010). *Media and communication research methods: An introduction to qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Bonanno, G. A., Galea, S., Bucciarelli, A., & Vlahov, D. (2007). What predicts psychological resilience after disaster? The role of demographics, resources, and life stress. *Journal of Consulting and Clinical Psychology*, 75(5), 671-682.
- Brenner, J. (2012). Pew Internet: Teens. Pew Research Center's Internet & American

  Life Project. Retrieved on May 2017 from

  http://www.pewinternet.org/Commentary/2012/April/Pew-Internet-Teens.aspx.
- Canetti, D., Galea, S., Hall, B. J., Johnson, R. J., Palmieri, P. A., & Hobfoll, S. E. (2010). Exposure to prolonged socio-political conflict and the risk of PTSD and depression among Palestinians. *Psychiatry*, 73(3), 219-231.
- Chi, M. T. H. (1997). Quantifying qualitative analyses of verbal data: A practical guide. *The Journal of the Learning Sciences*, 6(3), 271-315.
- Chipman, K. J., Palmieri, P. A., Canetti, D., Johnson, R. J., & Hobfoll, S. E. (2011). Predictors of posttraumatic stress-related impairment in victims of terrorism and ongoing conflict in Israel. *Anxiety, Stress, & Coping, 24*(3), 255-271.
- Coates, S. W. (2003). Introduction: Trauma and human bonds. In: J. L. Rosenthal, & D. S. Schechter (Eds.), *September 11: Trauma and human bonds* (pp. 1-14). New York, NY: Taylor & Francis.
- Cohen, E. (2008). Parenting in the throes of traumatic events. In J. Ford, R. Pat-Horenczyk, & D. Brom (Eds.), *Treating traumatized children: Risk, resilience* and recovery (pp. 72–84). New York, NY: Routledge.
- Coombes, L., Allen, D., Humphrey, D., & Neale, J. (2009). In-depth interviews. In: J. Neale (Ed.), *Research Methods for Health and Social Care* (pp. 197-210). Hampshire, UK: Palgrave Macmillan

- Dabner, N. (2012). 'Breaking ground' in the use of social media: A case study of a university earthquake response to inform educational design with Facebook. *The Internet and Higher Education*, 15(1), 69-78.
- Davis, L., & Siegel, L. J. (2000). Posttraumatic stress disorder in children and adolescents: A review and analysis. *Clinical Child and Family Psychology Review*, *3*(3), 135-154.
- Forkosh-Baruch, A., Hershkovitz, A., & Ang, R. P. (2015). Teacher-student relationship and SNS-mediated communication: perceptions of both role-players. *Interdisciplinary Journal of e-Skills and Lifelong Learning*, 11, 273–289.
- Gaskell, G. (2000). Individual and group interviewing. In M. W. Bauer & G. Gaskell (Eds.), *Qualitative researching with text, image and sound: a practical handbook* (pp. 38-56). London, UK: Sage.
- Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, *30*(1), 79-90.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59-82.
- Hershkovitz, A., & Forkosh-Baruch, A. (2013). Student-teacher relationship in the Facebook era: The student perspective. *International Journal of Continuing Engineering Education and Life-Long Learning*, 23, 33-52.
- Kuo, F. W., Cheng, W., & Yang, S. C. (2017). A study of friending willingness on SNSs: Secondary school teachers' perspectives. *Computers & Education*, 108, 30-42.
- Liu, S. B., Palen, L., Sutton, J., Hughes, A. L., & Vieweg, S. (2008). In search of the bigger picture: The emergent role of on-line photo sharing in times of disaster. In F. Fiedrich & B. Van de Walle (Eds), *Proceedings of the 5<sup>th</sup> Information Systems for Crisis Response and Management* (ISCRAM) 2008 Conference (pp. 140-149). Retrieved 26/02/2018 from http://www.iscramlive.org/portal/node/2236.
- Malka, V., Ariel, Y., Avidar, R., & Hen-Levi, A. (2015). Operation protective edge: The first What'sApp war? [in Hebrew]. *Kesher*, 47, 88-96.
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Thousand Oaks, CA: Sage.

- Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development*, 85(1), 6-20.
- Moscardino, U., Scrimin, S., Capello, F., & Altoè, G. (2014). Brief report: Self-blame and PTSD symptoms in adolescents exposed to terrorism: Is school connectedness a mediator? *Journal of Adolescence*, *37*(1), 47-52.
- Moustakas, C. (1994). Phenomenological research method. London, UK: Sage.
- Ophir, Y. (2017). SOS on SNS: Adolescent distress on social network sites. *Computers in Human Behavior*, 68, 51-55.
- Ophir, Y., Asterhan, C. S. C., & Schwarz, B. B. (2017). Unfolding the notes from the walls: Adolescents' depression manifestations on Facebook. *Computers in Human Behavior*, 72, 96-107.
- Ophir, Y., Rosenberg, H., Asterhan, C. S. C., & Schwarz, B. B. (2016). In times of war, adolescents do not fall silent: Teacher–student social network communication in wartime. *Journal of Adolescence*, 46, 98-106.
- Palen, L., Vieweg, S., Liu, S. B., & Hughes, A. L. (2009). Crisis in a networked world features of computer-mediated communication in the April 16, 2007, Virginia Tech event. *Social Science Computer Review*, 27(4), 467-480.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Thousand Oaks, CA: Sage.
- Prinstein, M. J., LaGreca, A. M., Vernberg, E. M., & Silverman, W. K. (1996). Children's coping assistance: How parents, teachers, and friends help children cope after a natural disaster. *Journal of Clinical Child Psychology*, 25(4), 463-475.
- Rosenberg, A., & Asterhan, C. S. C. (2017). What's App, sir? Teachers and students in Whatsapp groups [in Hebrew]. In: B. B. Schwarz, H. Rosenberg & C. S. C. Asterhan, (Eds.), *Breaking down barriers? Teachers, students and social network sites* (pp. 77-102). Tel Aviv: MOFET.
- Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques* (Vol. 15). Newbury Park, CA: Sage Publications.
- Ungar, M., Ghazinour, M., & Richter, J. (2013). Annual research review: What is resilience within the social ecology of human development? *Journal of Child Psychology and Psychiatry*, *54*(4), 348-366.
- Werner, E. E. (2012). Children and war: Risk, resilience, and recovery. *Development and Psychopathology*, 24(2), 553-558.

Wolmer, L., Hamiel, D., Barchas, J. D., Slone, M., & Laor, N. (2011).

Teacher-delivered resilience-focused intervention in schools with traumatized children following the second Lebanon war. *Journal of Traumatic Stress*, 24(3), 309-316.

Table 1  $Categories \ of \ students' \ perceptions \ of \ teacher \ support \ through \ SNT-based \ communication \ (N=68)$ 

Category	Freq.	Definition	Examples
Caring	40.3%	Students' sense that teachers care about them, usually by showing interest and concern to their well-being	It really helped and strengthen me to know that my teacher is thinking of me (F, 15)  I had a stronger sense of security because I knew that the teacher was thinking about us" (F, 14)
Reassuring	29.9%	Students' feelings of reduced anxiety through teachers' reassuring and strengthening messages. Reassuring messages boosted students' morale in moments of stress and provided a sense of security	When the "storm of fear" broke, she (the teacher) was quick to respond to each one of us that it would be okay and that our soldiers are strong and reliable" (M, 15),  Our teacher posts pictures and other stuff that boost our morale and strengthen us - like a video that shows how other countries support us" (F, 16)  Our teacher sent biblical commentaries relating to war and it helped us cope" (F, 17).
Emotional sharing	10.4%	Students' feelings that their teachers are tuned to their emotional needs. Students unloaded and shared their feelings with their teachers and friends	Our homeroom teacher asked each one of the students to write about what does his or her family is doing during these days. I've been writing about my family, about my thoughts, and about my expectations from the military operation. Talking about it helped me unload my inner feelings (F, 14)
Belonging	10.4%	Students' sense of partnership and 'togetherness' in which students and teachers share the same stressors and emotions	When I wrote that I am worried about our soldiers, my teacher wrote back that she also, can't fall asleep, because of that. I was happy that I was feeling the same way as my teacher (F, 15)
Distracting	6.0%	Entertaining content distracted students from the war stressors	We've been laughing a lot! It was nice to change the atmosphere a bit (M, 15)
Educational content	3.0%	Assistance with school assignments	My teacher helped me with studies (F, 17)

