Are "Sense of Coherence" and "Hope" Related Constructs? Examining These Concepts in Three Cultural Groups in Israel

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ABSTRACT

Introduction: The aim of this study was to evaluate the relationships between two coping factors which facilitate adoptive adjustment when facing stressful situations. We have examined links between sense of coherence (SOC) and the concept of hope as well as its wish and expectation components and its collective and individual dimensions. We have studied three cultural groups in Israel: secular Jews, religious Jews and Bedouin Arabs.

Method: Data were collected during two military operations (Pillar of Clouds and Protective Edge) from 385 adolescents aged 12-18; 76 secular Jews, 110 religious Jews and 199 Bedouin Arabs. Adolescents filled out self-reported questionnaires which were comprised of items determining demographics, sense of coherence and hope.

Results: Results show that while religious Jews reported the strongest SOC, Bedouin Arabs reported the strongest hope. As for the links, major differences were revealed between the Jewish groups and the Bedouin Arab group. In both Jewish groups significant correlations were found between the expectation component and/or the global hope and SOC; however, no links were found between the global hope or its components or dimensions and SOC among the Bedouin Arab group.

Conclusion: Overall, in spite of some overlap between these concepts in the Jewish groups it seems that SOC and hope have their own unique characteristics and, thus, stand as separate resources when facing stress situation. The discussion highlights cultural differences and similarities among these groups with regard to the main concepts of this article. Finally, some psychoeducational suggestions are offered, focusing on cultural sensitivity.

INTRODUCTION

The present study aimed to evaluate the link between two concepts, sense of coherence and hope as these concepts are cited in research as major sources for resiliency and adaptation during a variety of stressful situations in life (1). Our goal was to find out what components of the hope construct are related to sense of coherence. Searching several databases on this topic suggests that very few studies have looked at this relationship. One study that investigated the associations between hope and sense of coherence as separate concepts found non-significant positive relationships between these concepts. The author suggested a more in depth investigation in the future (2). Two years later, Almedom et al. (3) incorporated hope or more precisely loss of hope into the SOC scale (in Eritrean) because of cultural and linguistic demands. In this case, the link between these constructs was not the primary goal of the investigation, and therefore there was no conclusion relating to this link. We found one study that tried to examine this question thoroughly. The authors were trying to link the concept of hope and several scales of meaning. Indeed, they found that hope was a component of meaning (4). However, the shortcoming of this study for the present study research question is that only the meaningfulness part of "sense of coherence" was taken into consideration.

The lacuna in the literature sets the ground for the present study which has several aims. Antonovsky's (5) salutogenesis model and its core construct of "sense of coherence" serve as the foundation for the present investigation. We will try to answer the question: What are the different components of hope (wish, expectation) as well as the different dimensions of hope (individual vs. collective) that are related to sense of coherence? We will

examine this question in three cultural groups: Jewish secular, Jewish religious and Arab Bedouin adolescents in Israel.

SALUTOGENESIS AND SENSE OF COHERENCE

Approximately thirty years ago, Antonovsky (5) suggested a new model and conceptualization in stress research: "salutogenesis," which means the "origin of health." This is a continuum model which suggests that, rather than classifying health/illness dichotomously, each individual at any given moment is somewhere on the ease/dis-ease continuum (6). According to this model, people have general resistance resources (GRRs) that can help them conceptualize the world as organized and understandable. Sense of coherence (SOC) represents the motivation, and the internal and external resources one can use to cope with stressors, and plays an important role in the way one perceives challenges through life. SOC is a global orientation to see the world as more or less comprehensible (the internal and the external world are perceived as rational, understandable, consistent and expected), manageable (the individual believes that s/he has available resources to deal with situations), and meaningful (the motivation to cope and the commitment to emotionally invest in the coping process) (6).

The salutogenic model suggests that an individual with a strong SOC is less likely than one with a weak SOC to perceive many stressful situations as threatening, and, thus, anxiety provoking. Given their tendency to perceive the world as meaningful and manageable, individuals with a strong SOC will be less likely to feel threatened by events of war and missile attacks and less vulnerable after these have occurred (7).

HOPE

Hope for the future enables effective coping with developmental challenges. It expands options for the individual and helps him/her to examine sources of personal strength by relating to the future and not only by relying on the past (8).

Several researchers have tried to define hope, and have emphasized different components of this construct. For example, Staats (9) attributed hope to the cognitive perception of future potential events, which individuals wish for, and therefore it is bounded with positive emotions. Hope is seen as an interaction of *wishes* and *expectation* that the wishes will become real (10). Snyder (11) offered a different definition in which hope combines individual perceptions in order to generate alternative

ways to achieve desirable goals. He also suggested that hope is a personal resource which can be developed and fostered and that is essential for coping, success and decision making.

Researchers have agreed that sense of hope involves emotional elements as well as cognitive and deductive thinking to pursue new ideas and solutions (10, 12, 13). Hope is seen by some researchers as a positive attitude to life and the ability to have optimistic views (14-16). It is based on high cognitive processing, requiring mental representations of positively valued abstract future situations and, more specifically, it requires setting goals, planning how to achieve them, use of imagery, creativity, cognitive flexibility, mental exploration of novel situations, and even risk taking (12, 13, 17). The affective component of hope is considered a consequence of cognitive elements and may contain positive as well as negative features since individuals may realize that the achievement of their goal may involve struggles, costs, and endurance (13, 17). It seems that the emotional element of hope is rooted in early experiences of trust which have been influenced by others and by external events (18). This suggests that different sources can contribute to the development of hope: on the one hand, the individual's personal abilities and powers and, on the other hand, the environmental and collective structure (19). Thus, it seems that hope is not only psychological in nature but can also be understood as a social-environmental variable that may exert a significant impact (20).

When examining hope in social-psychological context, it is possible to evaluate it in terms of *individualistic* (self) and *collectivistic* (others) components (9). For example, when comparing Jewish and Bedouin Arab adolescents (in Israel) during and following missile attacks, it was found that Bedouin Arabs reported higher collectivistic hope compared to their Jewish counterparts. However, no differences were revealed in terms of individualistic hope. The explanation was that among the Bedouin Arabs hope was an expression of belonging to a society which values more collectivistic norms, as opposed to the Jewish adolescents who belong to a society which values individualistic norms (21).

THE CULTURAL GROUPS OF THE STUDY

The secular Jewish sample are those who observe little or no Jewish tradition and are the majority Jewish group in Israel, constituting almost half of Israel's total population. Secular Jews live modern Western lives. Most secular children and youth study in "state schools," part of the largest school system in Israel and whose values are based on the principles of the Jewish state. Secular Jews are approximately 40% of the entire Israeli population and 49% of the Jewish population in Israel (22).

The religious Jewish sample of the present study combines two sub-cultures of religious Jews: ultra-Orthodox and National Religious. Both groups practice religious observance and children from these sectors study in separate religious educational systems, rather than in the secular state one. The different Jewish religious groups are considered to be minority groups totaling about 22% of the Jewish population and 18% of the entire population in Israel (22, 23).

Bedouin Arabs: The Bedouin of the Negev are a minority group in Israel. They are Muslim Arabs who have inhabited the Negev desert since the fifth century CE. Traditionally, they were semi-nomadic tribes; however, during the past half century, they have experienced a rapid and dramatic transition. This is partially due to their having settled in one city and several villages. They have gradually become closer to modern Israeli and Western society. Still, this minority encounters enormous difficulties in the socio-cultural, political and economic domains (24). The present study examined adolescents who live in the largest Bedouin city in Israel.

RESEARCH BACKGROUND

This study was conducted during July-August 2014 (religious Jews and Bedouin Arab groups) and November 2012 (a secular Jewish group). These were periods when Israel was under missile attack on a daily basis (Operation Protective Edge, and Operation Pillar of Clouds). Adolescents experienced warning sirens and missiles falling several times a day for several weeks. The media covered the military operations 24 hours a day. Hundreds of missiles fell on private homes, residential buildings, schools, kindergartens and in open spaces. During Operation Protective Edge in 2014, 64 soldiers and 4 civilians were killed; 469 soldiers and 36 citizens were injured (25). During Operation Pillar of Clouds 6 Israelis were killed (including 2 IDF soldiers) and 231 were wounded (26).

In accordance with the literature review several research questions and hypotheses were formulated: A preliminary exploration compared the different groups on the two main variables – SOC and hope. Our hypothesis was that while Jews would report stronger SOC, Bedouins would report stronger hope (27).

Our main research questions had two main aims.

First, we investigated the relationships of SOC with the different components (wish/expectation) and the different dimensions (individual/collectivistic) of hope in the entire sample and in the three different cultural groups separately. Then, we compared the relationships of the above-mentioned variables in the three cultures and focus on the components of wish and expectation. We did so in order to find similarities and differences among the groups in the strength and the direction of the relationships.

Overall we expected some positive relationships between hope and SOC (4). However, since there is not enough research on this matter, no specific links were hypothesized between the hope components of wish and expectation or the individual (self) and collective (others) hope dimensions and the construct of SOC. Additionally, no specific hypotheses were formed regarding the differences between cultures in the strengths and directions of the relationships.

METHOD PARTICIPANTS

Three hundred and seventy-nine teenagers living Israel participated in the study: 76 secular Jews (55.1% girls), 110 religious Jews (69% girls) and 203 Bedouin Arabs (61.4% girls). The mean age of the secular group was M=16.76 (SD=1.13), for the religious group, M=15.75 (SD=1.61), and for the Bedouin Arab group M=15.57 (SD=1.33). While the entire Bedouin population for this study lived in Rahat, the largest Bedouin city in Israel, the Jewish population of Operation Pillar of Clouds lived mostly in cities (73%) and the others lived in towns and other communal villages. As for the population of Operation Protective Edge, 60% lived in cities while the others lived in a variety of communal towns and villages.

PROCEDURES

For the Jewish religious and Bedouin Arab groups, data were collected by questionnaires during July-August 2014. For the secular Jewish group data were collected by questionnaires during November 2012. In both cases, questionnaires were distributed during military operations when hundreds of missiles were fired at Israel, landing on the different cities and communities, and covering large regions of the state. During the military operations, schools were closed and adolescents stayed at home all day. One Jewish religious girl and one Bedouin Arab adolescent girl were recruited and were supervised by the

researchers to administer self-reported questionnaires to their peers in their homes or shelters. This study used a convenience sample. For the Bedouin Arab population questionnaires were translated into Arabic by the second author. The involvement of the administrators of the questionnaire was minimal and included only explanations of words that participants did not understand.

Secular Jews connect to the world via the internet which exists in almost every home of secular Jews in Israel. This led us to approach secular adolescents via the internet where they filled out the questionnaires online. Participation in all three groups was anonymous and voluntary, and all participants were informed that the researchers were interested in their experiences and feelings. The research proposal and the entire battery of questionnaires were sent to the Ben-Gurion University Department of Interdisciplinary Studies' ethics committee and approval to administer the questionnaires was received. The approval was first issued for Operation Pillar of Clouds (no. 2012-01) and it was re-issued for Operation Protective Edge (no. 2014-01).

For each scale, those who did not fully complete the questions which were part of the scale were removed from the analysis.

MEASUREMENTS

Sense of Coherence (SOC) (6) was measured using a series of semantic differential items on a 7-point Likert-type scale, with anchoring phrases at each end. High scores indicate a strong SOC. An account of the development of the SOC scale and its psychometric properties, showing it to be reliable and reasonably valid, appears in Antonovsky's writings (6, 28). In this study, the SOC was measured by the short form scale, consisting of 13 items, which was found highly correlated to the original long version (28). The scale includes such items as: "Doing the things you do every day is" - answers ranging from (1) "a source of pain and boredom" to (7) "a source of deep pleasure and satisfaction." In the present study, the Cronbach's alpha was .79 for the Jewish groups and .65 for the Bedouin Arab group.

Hope Index developed by Staats (9) is constructed as the interaction of wishes and expectations and includes items of hopes referring to self (individual) and to others or to broad global concerns (collective). Some items such as "to be competent" and "to be happy" reflect one's hope for oneself while others reflect hope for global issues, such as "peace in the world" and "justice in the world." Participants were asked to rate independently how much

they wish for a particular future occurrence and the extent to which they expect this to occur. Responses were on a scale of 0 (*not at all*) to 5 (*very much*). The multiplication of the Wish value by the Expect value generated the measure of hope. The Cronbach's alpha of the Hope Index was .86 for the Jewish samples and .95 for the Arab sample.

RESULTS

The first hypothesis was examined by means of a one-way Anova and results are presented in Table 1. Results show that according to the hypothesis, Bedouin Arab adolescents reported higher hopes. While the individual expectation component of hope was reported stronger among the Bedouin Arab adolescents compared to their Jewish counterparts, Collective expectation was the strongest among secular Jews followed by religious Jews and weakest by Bedouin adolescents. As for sense of coherence, the religious Jewish group differed significantly from both Bedouin Arab and secular Jews adolescents. It seems that Jewish religious adolescents reported the strongest sense of coherence following by secular Jews and Bedouin Arabs.

To answer the main research questions several correlations were run. First, we ran correlations between SOC and the different components (wish/expectation) and dimensions (individual/collective) of hope. This procedure took place for the entire sample together and separately for each cultural group, namely, secular Jews, religious Jews and Bedouin Arabs (Table 2). Examining

Table 1. Differences between the cultural groups on the study's variables

	Religious Jews n≈110 (a)		Secular Jews n≈76 (b)		Bedouin Arabs n≈200 (c)			
	М	SD	М	SD	М	SD	F	
Sense of coherence (1-7)	4.76	.85	4.37	.98	4.36	.88	7.81****(ab, ac)	
Wish (1-5)	4.63	.43	4.38	.78	4.45	.68	5.46***(ab)	
Expectation (1-5)	3.19	.97	2.82	.98	3.85	1.08	32.30***(ac, bc)	
Hope Index (1-25)	14.82	4.87	12.66	4.95	17.36	5.97	23.02***(ab, ac, bc)	
Wish Individual (1-5)	4.54	.51	4.34	.75	4.39	.70	3.13*(ab)	
Wish Collective (1-5)	4.77	.51	4.45	.99	4.54	.81	6.30**(ab, ac)	
Expectation Individual (1-5)	3.65	.93	3.38	.93	4.05	1.02	14.74***(ac, bc)	
Expectation Collective (1-5)	2.50	1.34	3.54	1.49	1.98	1.29	40.10***(ab, ac, bc)	

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

Table 2. Correlations between SOC and Hope components and Hope dimensions

SOC	Wish Individual	Wish Collective	Expectation Individual	Expectation Collective	Wish	Expectation	HOPE
All sample (n=385)	.01	.10	.16**	.04	.05	.11*	.12*
Secular Jews (n=76)	.00	.17	.50**	.39**	.09	.49**	.45**
Religious Jews (n=110)	22 [*]	.15	.29**	.13	08	.24*	.22*
Bedouins Arabs (n=199)	.06	.00	.03	05	.04	02	.01

*p<.05, **p<.01

the correlation between SOC and hope and/or its components showed no or very weak correlations with all variables. However, when looking into the correlations between the variables in the different groups of the study very interesting results were found. While among the secular Jewish group strong correlations were found between SOC individual expectation, collective expectation, global expectation and hope among the Bedouin group no correlation was found between SOC and any of the hope dimensions and/or hope components. As for the religious group, medium correlations were found between SOC and individual wish, individual expectation, global expectation and hope.

In order to understand whether there are significant differences between the groups in the strength of the correlations several z tests were run. Results are presented in Table 3. Results show that the main difference between Jewish and Bedouin Arab youth is in the relationship of expectation and hope as a global construct with SOC. While there are no relationships between these variables in the Bedouin Arab group, the relationships in the secular Jewish group are strong and moderate in the religious group. Another striking finding is the difference between

Table 3. Differences between the three cultural groups in the strength of the correlations as represented by z scores

	Differences between Bedouins Arabs and Religious Jews	Differences between Bedouins Arabs and Secular Jews	Differences between Religious Jews and Secular Jews
SOC with			
Wish individual	-2.36**	NS	NS
Wish collective	NS	NS	NS
Expectation individual	2.23*	3.79**	1.65*
Expectation collective	NS	3.37**	1.85*
Wish	NS	NS	NS
Expect	2.20*	3.98**	1.92*
Норе	1.78*	3.46**	1.72*

*p<.05, **p<.01

religious Jews and Bedouin Arabs in the relationship between wish individual and SOC. Once again, in the Bedouin Arab group there is no significant relationship, while in the Jewish group the relationship is negative and moderate.

DISCUSSION

The present study aimed to investigate the relationships between two main coping resources which are cited in the literature as resiliency factors when facing different stressful situations. More specifically, we examined sense of coherence and hope (individual and collective; wish and expectation) in three cultural groups, Jewish secular, Jewish religious and Bedouin Arab adolescents in Israel, during the acute stress situation of missile attacks. We wanted to add knowledge to the omission in the literature with regard to the relationships between these two important potential protective variables. First, as a preliminary examination we compared the three cultural groups on the different variables and their components.

The results of the comparison show that overall, religious Jewish adolescents hold the strongest sense of coherence among the three groups. It seems that the strong cultural religious roots which their society provides enable religious Jews to develop a strong sense of coherence including meaningfulness, manageability and comprehensibility even in difficult times, such as the period of this study when missiles were fired several times a day, exploding in various locations around the country. It should be noted that contrary to previous findings in which secular Jews and Bedouin Arab adolescents differed in their level of SOC and collective hope (e.g., 27), with Jews reporting stronger SOC and Bedouin reporting stronger collective hope, this study showed a different trend. No differences were found between the secular Jewish group and the Bedouin Arab group on these two variables. When comparing the levels of SOC of Bedouin Arab adolescents in previous studies with their level in

the present study, it seems that SOC has strengthened among this group of adolescents. It could be that the strength of the abovementioned variables show that the gap between secular Jews and Bedouin adolescents is probably closing, meaning that Bedouin society which has been undergoing tremendous transitions in the past decade is becoming closer to Western secular society (24, 29-). Moreover, having lived in a city with its facilities and characteristics for more than a decade, as opposed to living in rural villages, has enabled these adolescents to adopt Western values and create comprehensibility, manageability and meaningfulness in their lives.

Although becoming more similar to secular Jews on the SOC resource, the Bedouin adolescents still hold the strongest global hopes and expectations compared to both Jewish groups. Thus, it might be that Bedouin adolescents living in Rahat are strongly affected by parental individualistic socialization goals and have to direct their behaviors through positive expectations (such as self-confidence, personal happiness, ambitiousness) (27). They may have the motivation to achieve their goals and they perceive themselves as having the ability to determine the way to reach those goals to a greater degree than the Jewish adolescents. However, it should be noted that only individual expectations were reported stronger by Bedouin adolescents. Surprisingly, the most individualistic oriented adolescents (secular Jews) reported the highest collective expectations. It could be that during war time this group feels more social collectivism (32), which is expressed in this study in collective hopes.

Our second hypothesis was partially accepted and links (though weak) between sense of coherence and the expectation component of hope as well as the global hope scale were observed when examining the entire sample. However, when investigating each of the cultural groups separately, interesting and different results emerged among the three groups. It can be seen that in the Jewish samples the strongest relationships are between sense of coherence and the expectation component of hope. As sense of coherence is based mainly on cognitive and behavioral components it is not surprising that it is connected to the more cognitive and behavioral component of hope, namely, the expectation component. Therefore, it seems that the cognitive components are prominent and connected in the two different Jewish groups. On the other hand, it is striking that within the Bedouin Arab group no link was observed between SOC and the cognitive-behavioral component of hope, expectation. This result could be due

to the gap between the cognitive-behavioral components, namely, individual vs. collective expectations. Bedouin Arab adolescents have the highest levels of expectation for themselves but the lowest levels of expectation for others compared to both Jewish groups. This finding may be explained by the rapid process of transition within the traditional collectivistic Bedouin Arab population in southern Israel. As members of a highly collectivistic culture, Bedouin individuals are motivated to wish for and promote the goals of others (the collective) before or at the expense of their own personal goals (33-35). However, these youths may also be affected by Western individualistic values through the modernization process and those values would encourage them to wish for, expect to achieve, and promote their own personal goals (24, 36). This inconsistency or contradiction in the cultural values may affect the possible relationship between the cognitive-behavioral component and the SOC, which relies on consistent experiences and thus provides adolescents with an environment which is predictable. Exploration of the relevant results within the Jewish groups could provide further support for the abovementioned explanation; the secular group demonstrates the smallest gap between individual and collective expectations and shows the strongest relationships between the cognitive-behavioral component and SOC, followed by the religious group that demonstrates a moderate gap and moderate association.

A different explanation to the findings with regards to the Bedouin group could be the fact that Bedouin adolescents live in a deprived society. As opposed to several individual successes that they can see in their environment, it is more difficult to believe that things can be improved on the collective societal level.

An additional interesting result was the fact that sense of coherence was found to be linked negatively to "individual wish" in the religious Jewish group. It seems that the value system of these adolescents is different from individualistic Western society. In sociological terms, the individual is aware of his/her interests, but represses them and does not reveal them in public (37). From a more traditional Jewish perspective, the individual is not perceived as an individual being, but as part of the Jewish entity (38). Thus, it seems that the collective nature of this society is more important to youngsters belonging to this group than wishing for something for themselves. Thus, for an adolescent in religious society, if you wish something for yourself, your life is less comprehensible and meaningful.

STUDY LIMITATIONS

Information about their experiences during Operations Pillar of Cloud and Protective Edge was provided only by the adolescents themselves, and, therefore, the collected data are subjective. Results could also have been biased by social desirability. In future studies with similar designs, it would be prudent to include a measure of social desirability to test the degree to which this variable may bias the results. In addition, further research using other methods of data collection (e.g., interview techniques, diaries, observer ratings) would be beneficial and important for the evaluation of the validity of the obtained findings. Our data were collected in the midst of a war and during missile attacks; therefore, the samples are neither representative nor random. As such, some degree of potential sample bias should be taken into account. In addition, this is a primary study with relatively small convenience samples and data were collected in a variety of ways - via the internet and face to face. Therefore the findings might not be generalizable to the total population, particularly when making assertions regarding the Bedouin adolescents.

Future studies should consider larger representative samples with a focus on more cultural groups. For example, the religious Jewish group could be split into national religious and ultra-Orthodox; other groups in the Israeli society as well as in other societies around the world should be examined in order to find out if these variables relate to each other as they do in the Jewish group, in the Bedouin Arab group or in other ways.

CONCLUSION

To conclude, this study was conducted during two separate military operations, when hundreds of missiles were launched towards Israel every day. We aimed to investigate the relationships between two coping resources which have the potential to operate as protective factors during stressful events. More specifically, we compared three cultural groups, religious Jews, secular Jews and Bedouin Arabs on the coping resources of SOC and hope. Additionally, we compared the strength of the relationships between these variables in the three groups. Our results show that overall, religious Jews had the strongest SOC while Bedouin Arabs had strongest hopes. As for the relationships, among the Bedouin Arabs no relationships were observed, while in both Jewish groups, SOC was related to global hope and to the cognitive

behavioral component of hope - expectation. One of the explanations for these results is the gap between collective and individual hopes which was greatest in the Bedouin group, followed by the religious group, and almost no gap was found in the secular Jewish group. In spite of the relationships that were observed in the Jewish groups, it seems that SOC and hope each have separate characteristics that highlight them as separate constructs and coping resources. The differences between the groups in the strength of coping resources as well as in the relationships between the resources underline the need to study different cultural groups separately in order to provide precise results for each group, thereby making it possible to address each group's needs when facing acute collective stress situations. Continuing this line of thought, some psycho-educational prevention or intervention models can be applied based on the present study. As SOC and hope have previously been found to be important resilience factors when facing stressful situations (e.g., 1), it seems important to strengthen the weaker elements in each group in order to strengthen the overall resiliency in each group of adolescents.

References

- Davidson OB, Feldman DB, Margalit M. A focused intervention for 1st-year college students: Promoting hope, sense of coherence, and self-efficacy. J Psychol 2012;146:333-352.
- Gibson LM. Inter-relationships among sense of coherence, hope, and spiritual perspective (inner resources) of African-American and European-American breast cancer survivors. Appl Nurs Res 2003;16:236-244.
- Almedom AM, Tesfamichael B, Mohammed ZS, Muller J, Mascie-Taylor N, Alemu Z. "Hope" makes sense in Eritrean sense of coherence, but "loser" does not. J Loss Trauma 2005;10:433-451.
- 4. Feldman DB, Snyder CR. Hope and the meaningful life: Theoretical and empirical associations between goal-directed thinking and life meaning. J Soc Clin Psychol 2005;24:401-421.
- Antonovsky A. Health, stress, and coping. San Francisco, Cal.: Jossey-Bass, 1979.
- Antonovsky A. Unraveling the mystery of health: How people manage stress and stay well. San Francisco, Cal.: Jossey-Bass, 1987.
- Braun-Lewensohn O, Sagy S, Roth G. Brief report: Adolescents under missile attacks: Sense of coherence as a mediator between exposure and stress-related reactions. J Adolescence 2011;34:195-197.
- 8. Sharabi A, Levi U, Margalit M. Children's loneliness, sense of coherence, family climate, and hope: Developmental risk and protective factors. J Psychol 2012;146:61-83.
- Staats S. Hope: A comparison of two self-report measures for adults. J Pers Assess 1989;53:366-375.
- Staats SR, Stassen MA. Hope: An affective cognition. Soc Indic Res 1985;17:235-242.
- 11. Snyder CR. Hope theory: Rainbows in the mind. Psychol Inq 2002;13:249-275.
- Lazarus RS. Progress on a cognitive-motivational-relational theory of emotion. Am Psychol 1991;46:819.
- 13. Snyder CR. Hope and optimism. Encyclopedia of Human Behavior 1994;2:535-542.

- 14. Moorey S, Greer S. Psychological therapy for patients with cancer: A new approach. Arlington, Va.: American Psychiatric, 1989.
- Sawatzky R, Gadermann A, Pesut B. An investigation of the relationships between spirituality, health status and quality of life in adolescents. Appl Res Qual Life 2009;4:5-22.
- 16. Strang S, Strang P. Spiritual thoughts, coping and 'sense of coherence' in brain tumour patients and their spouses. Palliative Med 2001;15:127-134.
- 17. Snyder CR, editor. Handbook of hope: Theory, measures, and applications. Cambridge, Mass.: Academic Press, 2000.
- Erikson EH, Erikson JM, Kivnick HQ. Vital involvement in old age. New York, N.Y.: WW Norton & Company, 1994.
- 19. Feldman DB, Snyder CR. Hope and the meaningful life: Theoretical and empirical associations between goal-directed thinking and life meaning. J Soc Clin Psychol 2005;24:401-421.
- 20. Hobfoll SE, Briggs-Phillips M, Stines LR. Fact or artifact: The relationship of hope to a caravan of resources. In Jacoby R, & Keinan G, eds. *Between stress and hope: From a disease-centered to a health-centered perspective* Westport, Conn.: Praeger, 2003: pp. 81-104.
- 21. Sagy S, Adwan S. Hope in times of threat: The case of Israeli and Palestinian youth. Am J Orthopsychiat 2006;76:128-133.
- Braun-Lewensohn O, Sagy S. Sense of coherence, hope and values among adolescents under missile attacks: A longitudinal study. IJ CS 2010;15:247-260.
- 23. http://www.pewforum.org/files/2016/03/israel_survey_overview. hebrew_final.pdf (Retrieved January 5th , 2017).
- Hermann T, Be'ery G, Heller E, Cohen C, Leberl Y, Mozes H, Neuman K. The national-religious sector in Israel 2014. Jerusalem: Israel Democracy Institute, 2015.
- Abu-Bader S. The Negev Bedouin statistical data book. Beer-Sheva, Israel: Ben-Gurion University of the Negev, 2010 (in Hebrew).
- 26. https://www.ict.org.il/ictFiles/0/Database%20Reports/November%20 2012%20Report.pdf (Retrieved January 17th , 2017).

- 27. https://www.ict.org.il/Article/1262/Operation-Protective-Edge-A-Detailed-Summary-of-Events (Retrieved January 17th, 2017).
- Braun-Lewensohn O, Sagy S. Coping resources as explanatory factors of stress reactions during missile attacks: Comparing Jewish and Arab adolescents in Israel. Community Ment Hlt J 2011;47:300-310.
- 29. Antonovsky A. The structure and properties of the sense of coherence scale. Soc Sci Med 1993;36:725-733.
- 30. Abu-Sif A. Physiological and psychological violence against teenage girls in the Bedouin society of the Negev. Unpublished master's thesis. Ben-Gurion University of the Negev, Beer-Sheva, Israel, 2009 (in Hebrew).
- Mosco N, Atzaba-Poria N. In search of "the Bedouin adaptive adult" socialization goals of mothers and fathers from the Bedouin society of the Negev. J Cross Cult Psychol 2016;47:54-71.
- 32. Ben-Dor G, Pedahzur A, Canetti-Nisim D, Zaidise E, Perliger A, Bermanis S. I versus we: Collective and individual factors of reserve service motivation during war and peace. Armed Forces Soc 2008;34:565-592.
- Dwairy M. Individuation among Bedouin versus urban Arab adolescents: Ethnic and gender differences. Cult Diversity Ethnic Minority Psychol 2004;10:340.
- Ben-Ari A, Lavee Y. Cultural orientation, ethnic affiliation, and negative daily occurrences: A multidimensional cross-cultural analysis. Am J Orthopsychiat 2004;74:102.
- Hofstede G, Hofstede GJ. Cultures and organizations: Software of the mind. Intercultural cooperation and its importance for survival. London, New Delhi, New York: McGraw-Hill, 2005.
- Sedikides C, Gaertner L, Toguchi Y. Pancultural self-enhancement. J Pers Soc Psychol 2003;84:60.
- 37. Sagy S, Steinberg S, Fahiraladin M. The individual and the collective self in group encounters of Jews and Arabs in Israel: A debate with intervention strategies. Megamot (Trends) 2002;41:534-556 (in Hebrew).
- 38. Cohn-Sherbok D. Modern Judaism. London: Macmillan, 1996.