

## Binge Drinking and Military Setting

Leah Shelef<sup>1\*</sup>, Barak S<sup>2</sup>, Shmueli T<sup>3</sup>, Santo Y<sup>4</sup> and Yavnai N<sup>1</sup>

<sup>1</sup>Israel Defense Forces, Medical Corps, Ramat Gan, Israel

<sup>2</sup>School of Psychological Sciences and the Sagol School of Neuroscience, Tel Aviv University, Tel Aviv, Israel

<sup>3</sup>Lev-Hasharon Medical Mental Health Center, Netanya, Israel

<sup>4</sup>Ran Stock Consulting, Tel Aviv, Israel

\*Corresponding author: Leah Shelef, Ph.D, Israel Defense Forces, Mental Health Unit, Medical Corps, Ramat-Gan, Israel, Tel: +972-52-9255156; E-mail: Lshelef4@gmail.com

Received date: Jan 08, 2018; Accepted date: Jan 15, 2018; Published date: Jan 17, 2018

Copyright: © 2018 Shelef L, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Abstract

**Background:** The aim of the present study was to examine patterns of binge drinking at military service.

**Method:** 612 paired soldiers serving in the Israeli Defense Forces. Data consisted of self-report questionnaires demographic variables.

**Findings:** Higher rates of binge drinking were found among males, lower education, and lower intellectual scores. Among the 67 soldiers in combat units a significant correlation of 0.32, between those who reported binge drinking at recruitment and those who reported binge drinking at discharge, was found.

**Conclusion:** Rereported binge drinking among combat soldiers did not increase over the course of their military service.

**Keywords:** Binge drinking; Alcohol consumption; Military service; Soldiers; Combat; Adolescents; Psychiatric diagnosis; Stress; Recruitment; Alcohol use

### Introduction

Binge drinking refers to the consumption of an excessive quantity of alcohol in a relatively short time span [1,2]. Binge drinking is defined by the National Institute of Alcohol Abuse and Alcoholism (NIAAA) as a pattern of drinking that brings blood alcohol concentration (BAC) levels to 0.08 g/dL, which typically occurs after four consecutive drinks for women and five consecutive drinks for men in the course of about two hours [3].

Binge drinking has been associated with road accidents, school bullying, vandalism, and problems with the law [4], drug use [5] and mental illness, such as anxiety and mood disorders [6,7].

Israel is ranked relatively low in the consumption of alcohol-per-capita [4,8]. However, the prevalence of heavy episodic drinking among alcohol consumers is similar to that of western European countries [8]. Israel has witnessed waves of immigration in the 1990's, especially from the Former Soviet Union and Ethiopia. Among those groups the rates of problem drinking are higher as compared with Israel-born youth [9].

Alcohol consumption has been shown to be widespread among soldiers [10,11]. For example, 54% of the Croatian Army Special Forces reported harmful drinking, according to the Alcohol Use Disorders Identification Test Scale [12]. In a larger-scale U.S. Army study (n=1483), the 12-month prevalence of DSM-IV alcohol-use disorders were 3.1%, while 36.9% of the total sample reported binge drinking, and 13.9% reported heavy alcohol use [13]. Between 1998-2008, U.S.

Army personnel showed significant increases in heavy drinking (from 15% to 20%) and binge drinking (from 35% to 47%). The rate of alcohol-related serious consequences was 4% for non-binge drinkers, 9% for binge drinkers, and 19% for heavy drinkers. Importantly, army personnel experiencing high combat exposure reported higher rates of binge drinking (54.8%) as compared with heavy drinking (26.8%) [10].

Israeli youth are conscripted to mandatory military service from the age of 18, which also the age of legal alcohol is purchasing in Israel (Businesses are not allowed to sell alcohol to minors under 18). Adolescents' transition from civilian to military life necessitates psychological adaptation, since it affects every aspect of their life. Military service is being characterized as being exposed to high stress levels with or without deployment [14].

There are various reasons for binge drinking among young adults in the military. Firstly, binge drinking is a social phenomenon occurring in social occasions [15]. These group settings encourage consumption of high alcohol amounts compared to those who drink alcohol alone [15,16]. Military experiences are often stressful life event, particular prolonged exposure to the battlefield and life-threatening situations. Secondly, some binge drinking seems to be related with feelings of attractiveness and popularity among military age young adults [17]. Thirdly, some studies link alcohol consumption with stress anxiety, negative moods, and depression [6,7].

Given the paucity of information regarding the correlates of binge drinking among IDF soldiers, the aim of the present study was to examine patterns of binge drinking at recruitment and at discharge from military service. An additional aim was to examine the relationships between, demographics, socioeconomic status, intellectual functioning score, psychiatric diagnosis, and military

service characteristics and binge drinking. These variables were selected since they are frequently reported as related to binge drinking.

## Methods

### Study design

The present study examined a paired sample of (n=612) soldiers with data at both recruitment and discharge from military service. The data was gleaned from the IDF computerized database, which includes soldiers' demographic characteristics, military service data, intellectual functioning, psychiatric diagnosis and self-reporting of binge drinking.

The IDF recruitment process takes place in a single facility where all recruits were sampled (n=7077, not reported in this paper). The sampling was a systematic one, with about one out of every recruit being asked to complete a health and life style questionnaire which included data on drinking behaviour. The data is collection at day of recruitment. Using a self-reported anonymous questionnaire.

Discharge from military service is a decentralized process and therefore a lower number of discharged soldiers (n=1124 which are not reported in this paper) completed the health and life style questionnaire. A subset (n=612) of soldiers with paired data on both recruitment and discharge was obtained.

### Study population

The study population consists of IDF mandatory service soldiers with an age range of 18-25. Who were recruited or discharged from military service between January 2009 and December 2012. Of these participants, 612 created a cohort, providing paired data regarding their binge drinking behaviour.

### Study variables

Several independent variables were collected in this study as follows.

### Demographic variables

Gender and country of birth

### Socioeconomic status (SES)

Socioeconomic status (SES) was obtained from records of the Israel Ministry of Interior, which codes communities on a 1-10 scale based on the classification system of the Israeli Central Bureau of Statistics (CBS). This scale was recoded into three categories: low [1-3], average [4-6], and high [7-10].

### Education

This variable was assessed by the question: do you have a matriculation certificate? (Yes/No).

### Soldiers' intellectual functioning

This evaluation consisted of a cognitive test comprised of four subtests measuring intellectual ability. In this study, we divided the soldiers into low (10-60) and high (70-90) functioning, according to an independent scale comprised of four sub-tests measuring the intellectual ability assumed to be equivalent to IQ scores [18,19].

**Psychiatric diagnosis:** The mental health segments of IDF records are based on the ICD-10 [19]. It is important to note that at the time of recruitment, very few soldiers enlist with a mental profile (Psychiatric diagnosis), none of them can serve in a combat unit.

### Combat/non-combat soldiers

This nominal variable indicated the unit at discharge: a combat or non-combat unit.

### Military base conditions

Two types of military base conditions were recorded in this study: Open bases entail military service during daytime, with soldiers returning home every evening. Closed bases require soldiers to live on base, being released for weekend leave every 1-3 weeks. Accommodations at the base have been identified as a stressor for some soldiers [20].

### Outcome-the independent variable

Binge drinking was determined by the question: "Over the last 30 days, have you consumed five or more alcoholic drinks of any kind in the course of a few hours?". The response options were presented on a 4-point Likert-type scale, ranging from 1 (never) to 4 (very frequently). This ordinal scale was dichotomized for further analyses (never vs. reported binge drinking at any frequency). This definition for Binge drinking was used in previous research [9,21].

### The Sample

A cohort of 612 respondents to the binge-drinking question at both recruitment and discharge time points enabled an examination of variability in binge-drinking behaviour in the course of the soldiers' military service.

### Statistical analysis

The data was coded, entered into a Microsoft Excel spreadsheet, and analyzed by SPSS 21.0. Spearman correlations were calculated to detect associations between ordinal variables. Repeated measures were performed to test for between subjects, within subjects and interaction effects.

### Ethics Approval

This study was approved by the Institutional Review Board (IRB) of the IDF Medical Corps (#1201-2012). Informed consent was waived by this IRB.

### Results

Eight repeated measured tests were conducted (Table 1). The between effect measured the differences between the response categories of variables (e.g. male vs. female), and they are reported under the main rows effect column. The within effect measured the differences in binge drinking between recruitment and discharge. This effect was found statistically insignificant for each of the 8 tests, and was omitted from Table 1. Interaction effects examined the joint relationship between each of the independent variable and changes in binge drinking from recruitment to discharge. Table 1 Binge drinking rates of key variables.

variable	group	Descriptive statistics							Repeated measures test <sup>1</sup>				
		At Recruitment			At Discharge				Average between recruitment & discharge	Main rows effect (between subjects)		Interaction with time effect	
		Binge drinking rate	Std. Deviation	N	Mean	Std. Deviation	N	F		Sig.	F	Sig.	
Gender	female	0.21	0.408	391	0.21	0.411	391	0.212	19.986	0	0.927	0.336	
	male	0.36	0.48	219	0.32	0.466	219	0.336					
Combat duty <sup>2</sup>	no	0.25	0.434	543	0.25	0.432	543	0.249	2.296	0.13	1.354	0.245	
	yes	0.36	0.483	67	0.27	0.447	67	0.313					
Base type	open	0.25	0.433	310	0.25	0.436	310	0.252	0.138	0.71	0.739	0.39	
	closed	0.28	0.449	302	0.25	0.431	302	0.262					
Country of birth	other	0.28	0.452	134	0.31	0.463	134	0.295	2.285	0.131	0.666	0.415	
	Israel	0.26	0.438	478	0.23	0.424	478	0.246					
Socio-economic status	medium/ low	0.27	0.447	452	0.25	0.436	452	0.264	1.469	0.226	0.383	0.536	
	high	0.22	0.416	150	0.23	0.424	150	0.227					
Intellectual functioning	low	0.29	0.453	476	0.28	0.447	476	0.282	12.371	0	0.001	0.97	
	high	0.18	0.383	136	0.16	0.37	136	0.169					
Education	Without matriculation certificate	0.36	0.48	166	0.31	0.465	166	0.334	12.773	0	0.595	0.441	
	With matriculation certificate	0.23	0.42	446	0.23	0.419	446	0.228					
Psychiatric diagnosis at discharge	no	0.26	0.438	533	0.25	0.433	533	0.254	0.201	0.654	0.173	0.677	
	yes	0.29	0.457	79	0.25	0.438	79	0.272					

**Table 1:** Binge drinking rates in key groups.

Note: <sup>1</sup>The within effect measured the differences in binge drinking between recruitment and discharge. This effect was found statistically insignificant in each of the 8 tests, and was omitted from the table. <sup>2</sup>Combat duty, can change during service, one can start a combat unit and finish his service in other unit.

There were 391 female soldiers with 21.2% reporting binge drinking at either recruitment or discharge. There were 219 male soldiers with 33.6% reporting binge drinking at either recruitment or discharge. The difference in rates of binge drinking was significant at  $p < 0.001$ .

Significant ( $p < 0.001$ ) differences between subjects were intellectual functioning (lower rates of functioning were associated with higher rates of reported binge drinking), and education (lower education was associated with higher rates of reported binge drinking).

### Correlational analysis

16 Pearson tests were conducted, in order to examine correlations, among different groups, between binge drinking at recruitment and binge drinking at discharge (Table 2).

Most correlations were statistically significant, but rather weak, between 0.1 and 0.2. In other words, reporting binge drinking at recruitment predicts binge drinking at discharge (in almost every group), but explains only a small portion of its variance (between 1% to 4%).

Two findings, worth mentioning: a) Among the 391 female soldiers, no significant correlation was found between binge drinking at recruitment and binge drinking at discharge. b) Among the 67 soldiers in combat units a significant correlation of 0.32, between those who reported binge drinking at recruitment and those who reported binge drinking at discharge, was found.

## Discussion

Israel is a special country when it comes to patterns of alcohol and binge drinking. Drinking alcohol for religious purposes constitutes an important aspect of the Jewish tradition. On religious holidays, for example, even teenagers are encouraged to drink alcohol [22,23]. At the same time, a high percentage of the Israeli population abstains from alcohol drinking-40%, compared 11% in European countries [24], and the percentage of those who drink alcohol frequently is low [25].

variable	group	Correlation between recruitment & discharge	
		Pearson Correlation	Sig. (2-tailed)
Gender	female	0.098	0.054
	male	0.193**	0.004
Combat duty	no	0.123**	0.004
	yes	0.320**	0.008
Base type	open	0.195**	0.001
	closed	0.11	0.056
Country of birth	other	0.193*	0.025
	Israel	0.138**	0.003
Socio-economic status	medium/ low	0.108*	0.022
	high	0.278**	0.001
Intellectual functioning	low	0.117*	0.01
	high	0.268**	0.002
Education	Without matriculation certificate	0.014	0.857
	With matriculation certificate	0.203**	0
Psychiatric diagnosis at discharge	no	0.144**	0.001
	yes	0.204	0.072

**Table 2:** Correlational analysis.

The aim of the present study was to examine patterns of binge drinking at recruitment and at discharge from military service. This allows a within-subject and between subject analysis to explore the changes in binge drinking from recruitment to discharge. Binge drinking behaviour in the current study refers to the consumption of five consecutive drinks in the course of about two hours [3], for the last 30 days.

Our finding among male and female (33.6% and 21.2%, respectively;  $p < 0.001$ ) who reporting binge drinking supported by previous studies [23,26], who reported higher rates of binge drinking among Israeli men as compared with Israeli women. In addition, in one study reported higher rates of binge drinking among American men in the military as compared to American women in the military [27]. Yet the differences in this sample are relatively small. Binge

drinking among male soldiers is only 1.5 more frequent than female soldiers. In other study reported that male binge drinking is 3-4 times higher than female [26]. In other place found that binge drinking among men in the military is 2 times higher than among women in the military [27].

As we found soldiers who were born outside Israel did not differ from soldiers born in Israel in their reported rates of binge drinking. This finding contradicts previous findings [21,28] who reported heavier alcohol drinking and more alcohol related problems among those who were born outside of Israel, especially those born in countries previously belonging to the Soviet Union. Yet this finding supports those who did not find an association between binge drinking and country of birth [29]. One explanation for the lack of such an association by the process of acculturation, a process in which living in Israel results in accepting local norms of alcohol drinking [29]. A support for this explanation was found in the study where norms of drinking alcohol explained the differences between Israeli born and those born outside of Israel [28]. Support for this explanation was found also in the study where time spending with friends explained the differences between Israeli born and those who were born in the countries of former Soviet Union, and where those differences disappeared at the second generation of the immigrants from former Soviet Union.

As for the socio-economic status, our finding stands in contrast with study that who found lower rates of binge drinking among Jews with high socio-economic status compared to Jews with low socio-economic status [26]. A possible explanation for the contrast between these findings is the fact the recruitment into the military includes a filtering process. On one hand, the military doesn't recruit people with excessive alcohol drinking problems.

The Israeli army is known for being a melting pot, a place where young people spend a lot of time with their peers, and a place which has a major influence on local norms. This is most probably the reason why no differences were found, in the army, between soldiers born in Israel, and soldiers born outside of Israel.

Soldiers with low to moderate Socio-economic status did not differ from soldiers with high socio-economic status in their reported rates of binge drinking. Also, soldiers with psychiatric diagnosis at discharge did not differ from soldiers with no psychiatric diagnosis at discharge in their reported rates of binge drinking.

As for the significant differences between subjects were intellectual functioning (lower rates of functioning were associated with higher rates of reported binge drinking), and education (lower education was associated with higher rates of reported binge drinking). Assuming that intellectual functioning and education are interrelated then the findings of the current study correspond with previous studies who reported higher rates of binge drinking among those who did not complete their college education [26,27].

It is noteworthy to report that no significant differences were observed in those who served in combat units as compared with those who served in noncombat units.

Living in a conflict zone and being directly and indirectly exposed to on-going conflict can have detrimental effects on mental health [30-32], physical health [32,33], and health behaviours [32,34]. Populations who live under the conditions of on-going conflict may experience chronic stress from repeated overt and imperceptible



exposures, which can lead to increased vulnerability for developing unhealthy risk behaviours [32].

One study found increased risk for alcohol use disorders among the general, civilian adult population in Israel following exposure to on-going terrorism [35].

Based on the above studies it was to be expected that soldiers in combat units will report higher rates of binge drinking. A finding that was not supported in this study. It should be mentioned that there are additional studies who did not find any association between exposure to terrorist activities and alcohol consumption. In Israel alcohol consumption is considered less as a mean of coping with stress and more of a social recreation [22,35]. One of those studies indicated that exposure to a war increased alcohol problem in the following year only among those with history of child abuse [36].

Soldiers who serve in an open base did not differ from soldiers serving in a closed base in their reported rates of binge drinking.

One of the key findings of this study is that, the nature of the military experience in Israel was not predictive of binge drinking; specifically, the rate of reported binge drinking among combat soldiers did not increase over the course of their military service. The current finding is not consistent with previously-reported associations between combat exposure and the hazardous use of alcohol among military personnel [10,11]. Some studies have suggested that soldiers serving in combat units or subsequent to combat situations show higher binge-drinking rates, compared to non-combat soldiers [10,37,38]. It should be noted that not all studies report an association between combat experience and binge drinking.

A larger-scale U.S. Army study revealed no significant differences in drinking behavior between non-deployed soldiers and those recently deployed in Afghanistan [14]. Another study in the Sri Lanka army reports no significant differences between Special Forces and regular forces in hazardous drinking or binge drinking behaviors [38]. One possible explanation for the difference in the findings between the current study is the homogeneous population, while in other studies they compared two different populations (soldiers vs. civilians). Showing that there is a higher rate of binge drinking among soldiers compared with the civilian population [14,16]. An association between stressful military service and alcohol-consumption behaviors has been found especially among soldiers released from military duty [38,39].

A small number of studies have investigated the relationship between military service and risk-taking behavior [40] in Israel. One study, investigating IDF recruits, found that a greater awareness of death leads to higher motivation to enlist in a combat unit and to the expectation of being subjected to greater physical challenges in the course of military service. However, these findings were limited to participants with.

The current study has several strengths: a) The independent variables were routinely and independently collected and they are not related to any specific study. b) The paired sample allowed between subjects within subject's analysis and detection of interaction effects. It also has several limitations. First, the obtained sample was relatively small and the number of cases in some groups was too small to draw firm conclusions. The obtained sample was not stratified along the independent variables and may not be representative. Second, soldiers' subjective stress experience was not examined. It is important to derive conclusions regarding the association between military-service-induced stress and binge drinking, which take subjective stress levels

into account. Third, binge drinking was dichotomized (never/once or more in the last 30 days), making it difficult to assess any possible escalation in binge drinking habit during military service. The questionnaire was designed to evaluate binge drinking only 30-days before reporting.

## References

1. Miller JW, Naimi TS, Brewer RD, Jones SE (2007) Binge drinking and associated health risk behaviors among high school students. *Pediatrics* 119: 76-85.
2. Courtney KE, Polich J (2009) Binge drinking in young adults: Data, definitions, and determinants. *Psychological bulletin* 135: 142-156.
3. NIAAA. NIAAA Newsletter, (2004). Number 3. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services (DHHS) Retrieved from <http://pubs.niaaa.nih.gov/publications/Newsletter/winter2004/Newsletter>
4. Craig W, Harel-Fisch Y, Fogel-Grinvald H, Dostaler S, Hetland J, et al. (2009) A cross-national profile of bullying and victimization among adolescents in 40 countries. *Inter J Public Health* 54: 216-224.
5. Wechsler H (2000) Binge drinking: Should we attack the name or the problem. *Chronicle of Higher Education* 47: B12-13.
6. Fergusson DM, Horwood LJ, SwainCampbell N (2002) Cannabis use and psychosocial adjustment in adolescence and young adulthood. *Addiction* 97: 1123-1135.
7. Poulin C, Hand D, Boudreau B, Santor D (2005) Gender differences in the association between substance use and elevated depressive symptoms in a general adolescent population. *Addiction* 100: 525-535.
8. WHO (2014) Global Status Report on Alcohol and Health-2014. WHO. Retrieved from [http://apps.who.int/iris/bitstream/10665/112736/1/9789240692763\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/112736/1/9789240692763_eng.pdf)
9. Israelowitz R, Reznik A (2014) Ethiopian origin high-risk youth: a cross-cultural examination of alcohol use, binge drinking, and problem behavior. *J Ethnicity in Substance Abuse* 13: 179-184.
10. Bray RM, Brown JM, Williams J (2013) Trends in binge and heavy drinking, alcohol-related problems, and combat exposure in the US military. *Substance Use & Misuse* 48: 799-810.
11. Lande RG, Marin BA, Chang AS, Lande GR (2008) Survey of alcohol use in the US Army. *Journal of Addictive Diseases* 27: 115-121.
12. Sekulic D, Milanovic I, Bok D, Jukic I, Matika D (2014) Substance use and misuse in the Croatian Army Special Forces: Prevalence and influencing factors. *Inter J Occupational Medicine and Environmental Health* 27: 123-131.
13. Trautmann S, Schönfeld S, Behrendt S, Höfler M, Zimmermann P, et al. (2014) Substance use and substance use disorders in recently deployed and never deployed soldiers. *Drug and Alcohol Dependence* 134: 128-135.
14. Bodner E, Ben-Artzi E, Kaplan Z (2006) Soldiers who kill themselves: the contribution of dispositional and situational factors. *Archives of Suicide Research* 10: 29-43.
15. Lange JE, Voas RB (2000) Youth escaping limits on drinking: Binging in Mexico. *Addiction* 95: 521-528.
16. Storm T, Cutler RE (1981) Observations of drinking in natural settings: Vancouver beer parlors and cocktail lounges. *Journal of studies on Alcohol* 42: 972-997.
17. Levran N (2009) Association of Attractiveness and Popularity with Binge Drinking in Young Adults. *The Wesleyan J Psychology* 4: 5-15.
18. Weiser M, Reichenberg A, Rabinowitz J, Kaplan Z, Mark M, et al. (2001) Association between nonpsychotic psychiatric diagnoses in adolescent males and subsequent onset of schizophrenia. *Archives of General Psychiatry* 58: 959-964.
19. Goldberg S, Fruchter E, Davidson M, Reichenberg A, Yoffe R, et al. (2011) The relationship between risk of hospitalization for schizophrenia, SES, and cognitive functioning. *Schizophrenia bulletin* 37: 664-670.

20. Zohar AH, Shen G, Dycian A, Pauls D (2004) The Military Life Scale: a measure of perceived stress and support in the Israeli Defense Force. *The Israel J Psychiatry and Related Sci* 41: 33-44.
21. Walsh SD, Djalovski A, Boniel-Nissim M, Harel-Fisch Y (2014) Parental, peer and school experiences as predictors of alcohol drinking among first and second generation immigrant adolescents in Israel. *Drug and Alcohol Dependence* 138: 39-47.
22. Massey Z, Chartier KG, Stebbins MB, Canetti D, Hobfoll SE, et al. (2015) Explaining the frequency of alcohol consumption in a conflict zone: Jews and Palestinians in Israel. *Addictive Behaviors* 46: 31-38.
23. Levin TR (2014) The Influence of Religion on Attitudes toward Alcohol Use in Jewish Adolescents (Doctoral dissertation, Walden University).
24. Lopez-Quintero C, Grinshpoon A (2007) Alcohol drinking patterns and prevalence of alcohol-abuse and dependence in the Israel National Health Survey. *The Israel J Psychiatry and Related Sci* 44: 126.
25. Wilsnack RW, Vogeltanz ND, Wilsnack SC, Harris TR (2000) Gender differences in alcohol consumption and adverse drinking consequences: crosscultural patterns. *Addiction* 95: 251-265.
26. Neumark YD, Rahav G, Jaffe DH (2003) Socio-economic status and binge drinking in Israel. *Drug and alcohol dependence* 69: 15-21.
27. Stahre MA, Brewer RD, Fonseca VP, Naimi TS (2009) Binge drinking among US active-duty military personnel. *Ame J Preventive Medicine* 36: 208-217.
28. Shmulewitz D, Wall MM, Keyes KM, Aharonovich E, Aivadyan C, et al. (2012) Alcohol use disorders and perceived drinking norms: ethnic differences in Israeli adults. *J Studies on Alcohol and Drugs* 73: 981-990.
29. Isralowitz R, Reznik A (2015) Binge drinking and risk taking behavior among adolescent females in Israel. *J Child Adolescent Psychiatric Nursing* 28: 175-179.
30. Canetti D, Hall BJ, Rapaport C, Wayne C (2013) Exposure to political violence and political extremism. *Eur Psychologist* 18: 263-272.
31. Gelkopf M, Solomon Z, Berger R, Bleich A (2008) The mental health impact of terrorism in Israel: A repeat crosssectional study of Arabs and Jews. *Acta Psychiatrica Scandinavica* 117: 369-380.
32. Soskolne V, Baras M, Palti H, Epstein L (1996) Exposure to missile attacks: The impact of the Persian Gulf War on physical health, health behaviours and psychological distress in high and low risk areas in Israel. *Social Science & Medicine* 42: 1039-1047.
33. Palmieri PA, Chipman KJ, Canetti D, Johnson RJ, Hobfoll SE (2010) Prevalence and correlates of sleep problems in adult Israeli Jews exposed to actual or threatened terrorist or rocket attacks. *J Clinical Sleep Medicine: JCSM: Official publication of the American Academy of Sleep Medicine* 6: 557.
34. Ben-Zur H, Zeidner M (2009) Threat to life and risk-taking behaviors: A review of empirical findings and explanatory models. *Personality and Social Psychology Review* 13: 109-128.
35. Bleich A, Gelkopf M, Melamed Y, Solomon Z (2005) Emotional impact of exposure to terrorism among young-old and old-old Israeli citizens. *The American Journal of Geriatric Psychiatry* 13: 705-712.
36. Keyes KM, Shmulewitz D, Greenstein E, McLaughlin K, Wall M, et al. (2014) Exposure to the Lebanon War of 2006 and effects on alcohol use disorders: The moderating role of childhood maltreatment. *Drug and Alcohol Dependence* 134: 296-303.
37. Jacobson IG, Ryan MA, Hooper TI, Smith TC, Amoroso PJ, et al. (2008) Alcohol use and alcohol-related problems before and after military combat deployment. *JAMA* 300: 663-675.
38. Hooper R, Rona RJ, Jones M, Fear NT, Hull L, et al. (2008) Cigarette and alcohol use in the UK Armed Forces, and their association with combat exposures: a prospective study. *Addictive Behaviors* 33: 1067-1071.
39. Rona RJ, Fear NT, Hull L, Greenberg N, Earnshaw M, et al. (2007) Mental health consequences of overstretch in the UK armed forces: first phase of a cohort study. *BMJ* 335: 603.
40. Glicksohn J, Ben-Shalom U, Lazar M (2004) Elements of unacceptable risk taking in combat units: An exercise in offender profiling. *J Res in Personality* 38: 203-215.