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The Double-Edged Sword - Outward and Inward Directed Aggression among War Combatants

Avigal Snir, Liat Itzhaky, and Zahava Solomon

Inspired by the two-stage model of countervailing forces, we explored the mechanism underlining inward and outward aggression among ex-combatants. Israeli veterans (N = 230) reported their partner's violence (outward aggression), suicidal ideation (inward aggression), aggressive impulses, posttraumatic stress disorder (PTSD), paranoid ideation and guilt. Suicidal ideation was related to aggressive impulses only in the presence of PTSD, or under high guilt; whereas paranoid ideation buffered these effects. Violence towards the partner, on the other hand, was related to aggressive impulses under low guilt and in the absence of PTSD. Aggressive impulses underline both suicidal ideation and partner violence. The inter-relationships between PTSD, guilt, and paranoid ideation influence the manifestation of aggression and the direction it takes.

Keywords aggression, posttraumatic stress disorder, suicidal ideation, violence, war combatants

INTRODUCTION

Aggressive behaviors are often highly controlled in daily life. However, in times of war, combatants are exposed to severe violence, in danger of physical injury and death, and witness the death and injuries of others. They are also required to engage in aggressive and violent acts in the battlefield, which is conceived of and encouraged as a legitimate way to fulfill the goals of the war.

Previous epidemiologic studies have consistently revealed lingering aggression

in veterans post-war. Aggression may be directed outward, against others, in a deliberate attempt to cause physical or psychological injury to other. It may also be directed inward, against the self, leading to self-destructive behaviors, suicidal ideation or actions. Combat veterans have reported high outwardly directed aggression, manifested in the high rates of aggressive urges and outbursts, intimate relationship aggression (e.g., Taft, Watkins, Stafford, Street, & Monson, 2009), verbal/physical violence (Thomas et al., 2010), violent crimes, and even homicide (Sontag & Alvarez, 2008). Studies have also found high inwardly directed aggression, manifested in high rates of completed suicide and suicidal ideation among ex-combatants (Jakupcak et al., 2011; Kuehn, 2009).

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Numerous empirical studies have indicated a close association between outward and inward aggression in various populations (cf., Hillbrand, 2001), specifically among combatants (e.g., Mehlum, 1992). Whereas the experience of combat may reflect a common basis for outward and inward aggression, the noteworthy question that remains, and therefore will be the focus of the current study, is what factors determine the direction of the aggression—inward vs. outward.

Plutchik, Van Praag, and Conte (1989) proposed a model of countervailing forces for predicting inward and outward aggression. The model assumes that any event is a vectorial resultant of the interaction of opposing forces. This assumption is in line with psychoanalytic theory that states that all behavior involves an energy source (libido), a direction, and an object. In the application of these ideas the authors suggested that both suicide and violence represent the expression of the same underlying aggressive impulse.

In the first stage of the proposed model this aggressive impulse may be “amplified” or “attenuated,” depending on the presence or absence of several factors that influence the strength of the impulse, thereby determining whether it crosses a threshold to be expressed. For example, physical illness and dyscontrol symptoms were identified by Plutchik et al. (1989) as amplifiers; whereas family network, certain coping styles, and personality traits were identified as attenuators.

In the second stage the authors have also proposed that a separate set of variables determine the direction of the aggressive impulse, whether it is directed towards others or towards the self. In their early study Plutchik et al. (1989) showed that large number of life problems (including work, medical, and family problems), feelings of hopelessness, and recent psychiatric symptom predispose an individual to direct the aggressive impulse toward the self, resulting in a risk

of suicide. In contrast, the trait of impulsivity, problems with the law, menstrual problems in women, and recent life stresses all dispose the individual to direct the aggressive impulse toward others, resulting in a risk of violence.

To our knowledge, this early comprehensive theoretical model was not tested empirically. In fact, most of the literature regarding suicidality and violence has been non-overlapping, and only few attempts have been made to integrate findings from these disparate literatures (e.g., Swogger, Van Orden, & Conner, 2014). In the current study we were inspired by the model proposed by Plutchik et al. (1989) and aimed to adapt it to the unique population of ex-combatants. Using the same theoretical framework, the proposed model enabled us to predict suicidal ideation (inwardly directed aggression) and violence towards their partner (outwardly directed aggression). We suggest that in the veterans’ post war life, the lingering aggressive impulses would be amplified in the presence of Posttraumatic Stress Disorder (PTSD). In the second step, we suggest that guilt and, paranoia, as well as the interaction between them (guilt X paranoia) would determine the direction of the intense aggressive impulses.

A TWO-STAGE MODEL OF COUNTERVAILING FORCES – THE CASE OF VETERANS’ INTIMATE PARTNER VIOLENCE AND SUICIDAL IDEATION

Aggressive Impulses

Although aggression is an innate force, emotional and interpersonal experiences impact its intensity and serve as triggers that catalyze its overt expression. As previously noted, it is expected that aggressive impulses arise in times of war, when experiences such as threat and loss of control are inherent and high arousal is, in fact, necessary for survival. Once the war is over,

symptoms of high-arousal and lack of control, together with intense aggressive impulses are commonly observed among ex-combatants (e.g., Dekel, Solomon, Ginzburg, & Neria, 2003; Lorber, 2004). Such arousal may lead to a reduced ability to engage in self-monitoring or other inhibitory processes (Novaco & Chemtob, 1998) that might set the stage for the expression of these aggressive impulses.

Post-Traumatic Stress Disorder

PTSD is the most common pathological psychological outcome of traumatic experiences, including combat exposure, and is comprised of four symptom clusters: hyper arousal, negative alterations to mood and cognition, avoidance, and intrusion (American Psychiatric Association, 2013).

Previous research documented the elevated risk of suicide and suicidal ideation among veterans with PTSD (Krysinska & Lester, 2010). In an attempt to track the specific symptoms of PTSD that are associated with suicidal ideation, Bell and Nye (2007) showed that re-experiencing, as part of the intrusion symptom cluster is significantly associated with suicidal ideation, whereas the other symptom clusters (avoidance and increased arousal) are not.

A large body of research has also linked PTSD with partner violence (e.g., Taft et al., 2011) among veterans. This link has been explained as resulting from a deficit in anger regulation, related to PTSD (Chemtob, Novaco, Hamada, & Gross, 1997). In a recent study by Novaco and Chemtob (2015), it was found that, in conjunction, anger and PTSD are related to veterans' violence, whereas in the absence of anger, PTSD on its own was not related to veterans' violence.

The Double Edged Sword

Intense aggressive impulses could be viewed as a double-edged sword, where

one edge may be directed towards others and/or the other is directed towards the self. The pertinent question then becomes what factors determine the direction of the aggressive impulse? We propose that *paranoid ideation* and *guilt*, which are often observed among combatants, affect the direction aggression will take.

Paranoid Ideation. Paranoid ideation is the "ideation, of less than delusional proportions, involving suspiciousness or the belief that one is being harassed, persecuted, or unfairly treated" (DSM-V; APA, 2013, p. 826). The ability to detect or anticipate threats in the social environment is a critically important interpersonal skill (Green & Phillips, 2004). Studies suggest that in many cases, beliefs that appear to be paranoid stem from real life experiences and may constitute rational responses to threatening environments (e.g., Rippey & Newman, 2006; Sue, Capodilupo, & Holder, 2008). It is thus natural that ex-combatants who were the targets of extreme interpersonal aggression in the battlefield are at risk to develop a suspicious point of view (Hendin & Haas, 1984).

Anticipation of aggression from others often evokes aggressive responses. In these cases, aggression serves as a defense mechanism in which one feels he/she has been or will be victimized and defends himself/herself by becoming the aggressor. Indeed, research has continuously supported a strong link between paranoid ideation and outward aggression (e.g., Kaighobadi & Shackelford, 2009). The MacArthur Study of Violence Risk (Monahan, 2002; Monahan et al., 2001), a large-scale, prospective longitudinal study of violence in the community among adults discharged from psychiatric hospitals, has produced support for the idea that a generally suspicious attitude toward others significantly predicts later violent behavior, including physical and sexual assault (Appelbaum, Robbins, & Monahan, 2000). However, this effect was eliminated when

controlling for anger and impulsivity. This finding calls for further exploration with regards to the inter-relations between anger and paranoid ideation when predicting violence.

In contrast to paranoid ideation, where one gives negative attributes to his surroundings, guilt may represent the tendency to direct of these negative attributions toward the self. *Guilt* is characterized as feelings of distress, rising in response to one's personal oppositions to one's own actions, thoughts and intentions (Baumeister, Stillwell, & Heatherton, 1994). Hendin and Haas (1984) suggest that any traumatic situation, in which people feel frightened or helpless, includes a deep rooted tendency to blame oneself. Combatants often suppress feelings of guilt during combat in order to protect themselves psychologically and physically (Lifton, 1973). However, this repressed or dissociated guilt tends to increase dramatically and come to the forefront when the war ends. Indeed, studies have documented elevated feelings of guilt among war veterans upon homecoming (i.e., Litz et al., 2009).

Menninger (1938) linked guilt and self-harm and referred to one's "wish to be killed" as a way to deal with guilt. Indeed, studies have shown that feelings of guilt are associated with various expressions of inward aggression, including suicidal ideation and attempted suicide among veterans, especially among those who were involved in transgression (Bryan, Bryan, Morrow, Etienne, & Ray-Sannerud, 2014; Maguen et al., 2011). Another study showed the important role of guilt, specifically combat guilt, in the association between PTSD and suicidal ideation (Hendin & Haas, 1991). Recently, Bryan et al. (2015) have found guilt to mediate the relation between depression and suicidality among combatants, highlighting the importance of guilt feelings in this unique population.

Following the model of Plutchik et al. (1989) we expect that:

1. Aggressive impulses will be related to both partner violence and suicidal ideation;
2. PTSD will act as an amplifier of these aggressive impulses;
3. Guilt will moderate the association between aggressive impulses and suicidal ideation. Specifically, aggressive impulses will predict suicidal ideation only under the condition of high guilt.
4. Paranoid ideation will moderate the interaction between aggressive impulses and partner violence. Specifically, aggressive impulses will predict partner violence only under the condition of high paranoid ideation.

METHOD

Procedure and Participants

The current study is part of a larger longitudinal research assessing the aftermath of the 1973 Yom Kippur War (YKW) (for details see Solomon, Horesh, Ein-Dor, & Ohry, 2012). The data for the current study were collected in 2003 (30 years after the war). A total of 349 veterans participated in the first wave of this study (in 1993). In the second wave (in 2004), 230 veterans participated, constituting a 65% response rate. Only participants who participated in the second wave were included in the current study. Importantly, no significant differences were found between those who participated in the follow-up assessments in regard to initial military rank, age, and education. The sample was comprised of 230 Israeli male veterans; approximately half ($N=121$) were held in captivity for several months. The mean age of the participants at the time of this study was 53.6 ($SD=4.56$), and mean years of schooling was 13.94

(SD = 3.45). Additionally, 93.4% were married, 61.7% defined themselves as secular; 17.1% assessed their income as lower than average, 25.7% as average, 35.6% as a somewhat higher than average, and 21.6% as much higher than average.

Veterans were phoned and, after an explanation of the purpose of the study, were asked to take part in the assessment. Participants filled the study's questionnaire, after signing an informed consent form. The study was approved by the ethic committees of both the Israeli Defense Forces and Tel Aviv University.

Measures

Partner Violence. Partner violence was assessed as a measure for outward aggression, using the Conflict Tactics Scale (Straus, 1979). This is a self-report scale that includes 7 items measuring verbal aggression (e.g., insults or swearing, yelling) and 13 items measuring physical aggression (e.g., throwing things, pushing, grabbing, shoving). Participants are asked to rate how often they perpetrated each type of aggressive behavior over the previous year, from *never* (1) to *every day* (6). One index reflecting the frequencies of verbal and physical aggression was computed. The Conflict Tactics Scale has an established internal consistency ranging from .88 to .95 (Straus & Gelles, 1990). In this study the reliability value was good (Cronbach's α was .90).

Suicidal Ideation. Suicidal ideation was assessed as a measure for inward aggression, using two items derived from the Symptom Checklist-90 (SCL-90; Derogatis, 1977). Participants are asked to indicate how frequently they experienced each symptom during the last 2 weeks on a 5-point distress scale (0 = not at all and 5 = very much). The two items were: a) "thoughts about ending your life";

b) "thoughts about death." Due to the strong correlations between the two items ($r = .56$), we calculated the mean score of the two items as a suicidal ideation index. The use of two items as indicators of suicidality has been previously tested (Zerach, Levi-Belz, & Solomon, 2014) and was recently found to be a valid approach (Desseillers et al., 2012). The reliability value for suicidal ideation was moderate (Cronbach's α was .69).

Aggressive Impulses. Aggressive impulses were assessed using three items from the SCL-90's (Derogatis, 1977) hostility subscale (i.e., "feeling easily annoyed or irritated," "having urges to beat, injure, or harm someone," "having urges to break or smash things"), which reflects a rising aggressive impulse. The three other items of the hostility subscale reflected actual aggressive behavior and therefore were not included. Participants are asked to indicate how frequently they experienced each symptom during the last 2 weeks on a five-point distress scale. In the present study the internal consistency of this subscale was good (Cronbach's α was =.88).

Paranoid Ideation. Paranoid ideation was assessed using the SCL-90's (Derogatis, 1977) paranoid ideation subscale. This subscale is comprised of six items (e.g., "feeling others are to blame for troubles," "feeling people will take advantage of you"), and participants are asked to indicate how frequently they experienced each symptom during the last 2 weeks on a 5-point distress scale. In the present study the internal consistency of this subscale was good (Cronbach's α was =.81).

Guilt. Guilt was assessed using the Trauma-Related Guilt Inventory's (TRGI; Kubany et al., 1996) distress subscale. The TRGI is a 32-item self-report questionnaire composed of three sub-scales (i.e., guilt distress, global guilt, and guilt

cognitions). The questions are related to specified traumatic events (e.g., combat-related guilt, incest-related guilt). In the present study, for reasons of parsimony, we relied on the guilt-distress sub-scale for hypothesis testing; this subscale was strongly associated with other subscales of the TRGI (Pearson's correlations ranged between .86 and .65, p 's < .001). Moreover, the guilt distress scale demonstrated high internal consistency (Cronbach's α was .90).

Post-Traumatic Stress Disorder. Post-traumatic stress disorder was assessed using the PTSD Inventory (PTSD-I; Solomon et al., 1993), a 17-item self-report questionnaire based on the DSM-IV (American Psychiatric Association, 1994) criteria, which was the most current version when the study conducted. Items are scored on a four-point rating scale, ranging from (1) *least* to (4) *greatest*. Participants were identified as having PTSD if they endorsed at least one intrusive symptom, three avoidant symptoms, and two hyper-arousal symptoms. The PTSD-I has strong reliability and convergent validity when compared with diagnoses based on structured clinical interviews (Solomon et al., 1993). In the present study the internal consistency of the PTSD Inventory was strong (Cronbach's α was =.96).

RESULTS

Preliminary analyses revealed high positive correlations between partner violence and suicidal ideation. Moreover, both types of aggression were positively associated with PTSD, aggressive impulses, paranoid ideation, and guilt (see Table 1).

Predictions of Partner Violence and of Suicidal Ideation

To predict partner violence and suicidal ideation we conducted two hierarchical multiple regression analyses see Table 2 and Table 3 respectively. All continuous independent variables were mean-centered prior to analysis. Significant interactions were interpreted following the recommendation of Aiken, West and Reno (1991). In the first step, demographic variables (age and education), aggressive impulses, PTSD, guilt, and paranoid ideation were entered as predictors. In the second step, two-way interactions between aggressive impulses, PTSD, guilt, and paranoid ideation were entered. In the third and fourth steps, three-way and four-way interactions were entered respectively.

Suicidal Ideation

The independent variables in the regression model explained 49% of the

TABLE 1. Pearson Correlations Between the Study Variables

	Partner violence	Suicidal ideation	Aggressive impulses	PTSD	Paranoid ideation	Guilt
Partner violence	1	.45***	.59***	.27***	.48***	.35***
Suicidal ideation		1	.58***	.45***	.57***	.54***
Aggressive impulses			1	.55***	.72***	.64***
PTSD				1	.55***	.66***
Paranoid ideation					1	.64***
Guilt						1
<i>M</i>	1.19	.48	.76	.36	.92	1.58
<i>Sd</i>	.29	.79	.77	.48	.94	1.22

Note. *** p < 0.001.

TABLE 2. Results of Hierarchical Regression Analyses Predicting Suicidal Ideation by Aggressive Impulses, PTSD, Paranoid Ideation and Guilt

Predicting Variables		Step 1	Step 2
Step 1	Age	-.00	-0.01
	Education	0.02	0.02
	Aggressive Impulses	0.26***	.07
	PTSD	-0.08	-0.12
	Paranoid Ideation	0.16*	0.22**
	Guilt	0.12	0.11
Step 2	Aggressive Impulses × PTSD		0.18*
	Aggressive Impulses × Paranoid Ideation		0.08
	Aggressive Impulses × Guilt		0.29***
	PTSD × Paranoid Ideation		-0.19*
	PTSD × Guilt		-0.02
	Paranoid Ideation × Guilt		-0.23**
R^2		0.42***	0.49***
ΔR^2			.07***

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

TABLE 3. Results of Hierarchical Regression Analyses Predicting Partner Aggression By Aggressive Impulses, PTSD, Paranoid Ideation and Guilt

Predicting Variables		Step 1	Step 2	Step 3
Step 1	Age	0.00	0.00	0.00
	Education	-0.00	-0.00	-0.00
	Aggressive Impulses	0.16***	0.12***	0.14***
	PTSD	0.02	-0.00	.00
	Paranoid Ideation	0.04	-0.00	-0.01
	Guilt	-0.02	-0.03	-.04
Step 2	Aggressive Impulses × PTSD		0.00	-0.04
	Aggressive Impulses × Paranoid Ideation		0.12***	-0.01
	Aggressive Impulses × Guilt		-0.05	-0.06*
	PTSD × Paranoid Ideation		0.02	-0.02
	PTSD × Guilt		-0.00	-0.02
	Paranoid Ideation × Guilt		0.02	0.01
Step 3	Aggressive Impulses × PTSD × Paranoid Ideation			0.02
	Aggressive Impulses × PTSD × guilt			0.06*
	Aggressive Impulses × guilt × Paranoid ideation			0.11***
	PTSD × Paranoid Ideation × Guilt			0.01
R^2		.38***	.55***	.63***
ΔR^2			.21***	.08***

Note. * $p < 0.05$, *** $p < 0.001$.

Outward and Inward Aggression among Ex-Combatants

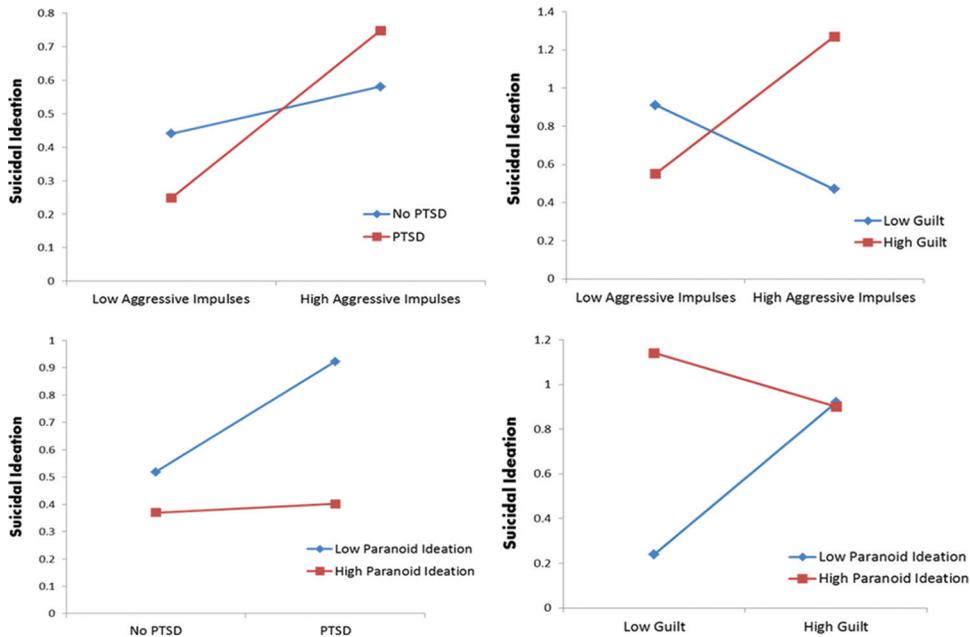


FIGURE 1. Suicidal Ideation as a function of the interactions between aggressive impulses, PTSD, guilt and paranoid ideation.

variance ($F_{10,200} = 16.65, p < 0.001$). In step 1, paranoid ideation ($\beta = .22, p < .001$) was positively associated with suicidal ideation. In step 2, two-way interactions between aggressive impulses \times PTSD ($\beta = .18, p < .01$), aggressive impulses \times guilt ($\beta = -.29, p < .001$) and PTSD \times paranoid ideation ($\beta = -.19, p < .001$) and paranoid ideation \times guilt ($\beta = -.23, p < .001$) were significant. Three-way and four-way interactions did not reach significance and therefore were omitted from the analyses.

Probing the interaction between aggressive impulses and PTSD demonstrated that aggressive impulses were positively associated with suicidal ideation in the presence of PTSD ($\beta = .39, p < .001$), but not in the absence of PTSD ($\beta = .21, p = .47$). Probing the interaction between aggressive impulses and guilt demonstrated that aggressive impulses were positively associated with suicidal ideation only under the condition of high guilt ($\beta = .46,$

$P < 0.001$), however not under the condition of low guilt ($\beta = -.27, P = .07$). Probing the interaction between PTSD and paranoid ideation demonstrated that the presence of PTSD was positively associated with suicidal ideation under the condition of low paranoid ideation ($\beta = .31, p < .001$), however not under the condition of high paranoid ideation ($\beta = .06, p = .58$). Finally, probing the interaction between guilt and paranoid ideation demonstrated that guilt was positively associated to suicidal ideation under the condition of low paranoid ideation ($\beta = .48, p < 0.001$), however not under the condition of high paranoid ideation ($\beta = -.02, p = .02$). See Figure 1 for the interactions predicting suicidal ideation.

Partner Violence

The independent variables in the regression model explained 63% of the

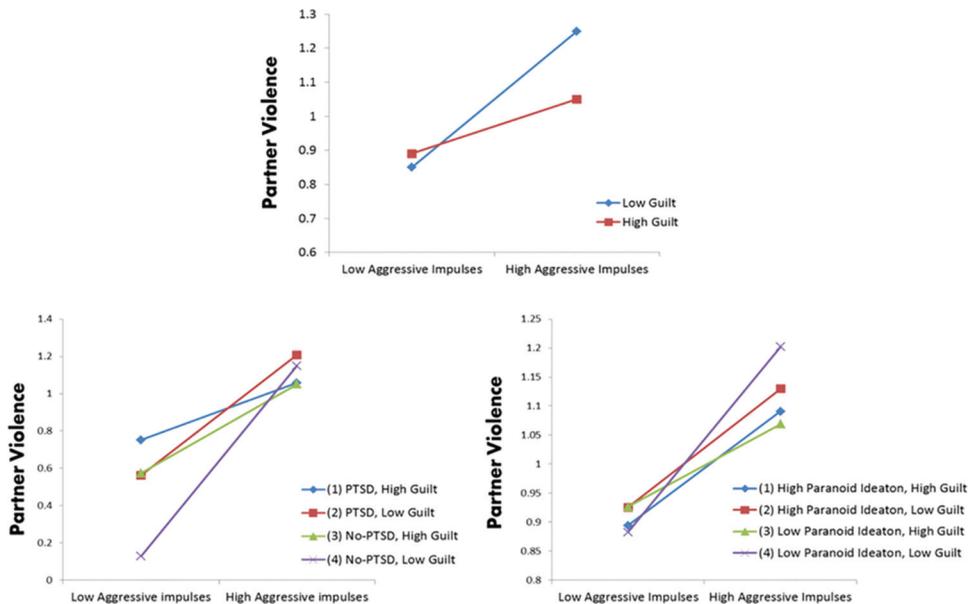


FIGURE 2. Partner violence as a function of the interactions between aggressive impulses, PTSD, guilt and paranoid ideation.

variance ($F_{117,174} = 18.35$, $p < 0.001$). In step 1, aggressive impulses ($\beta = .14$, $p < .001$) were positively associated with partner violence. In step 2, two-way interactions between aggressive impulses X guilt ($\beta = -.06$, $p < .01$) were significant. In step 3, three way interactions between aggressive impulses x PTSD x guilt ($\beta = .06$, $p < .05$), and between aggressive impulses x guilt x paranoid ideation ($\beta = .11$, $p < .001$) were significant. Four-way interactions did not reach significance and therefore were omitted from the analyses.

Probing the two-way interaction between aggressive impulses and guilt demonstrated that the positive association between aggressive impulses and partner violence were stronger under the condition of low guilt ($\beta = .27$, $P < 0.001$), than under the condition of high guilt ($\beta = -.10$, $P < 0.01$). Probing the first three-way interaction (aggressive impulses x PTSD x guilt) demonstrated that the association between aggressive impulses and partner

violence was significant only under the condition of low guilt and in the absence of PTSD ($\beta = .21$, $p < .001$). Neither under the condition of high guilt nor in the presence of PTSD did the association between aggressive impulses and partner violence reach significance. Probing the second three-way interaction (aggressive impulses x guilt x paranoid ideation) demonstrated that the association between aggressive impulses and partner violence was significant under the condition of high-guilt and high-paranoid ideation ($\beta = .23$, $p < 0.001$), and also under the condition of low-guilt and low-paranoid ideation ($\beta = .43$, $p < 0.001$). See Figure 2 for the interactions predicting partner violence.

DISCUSSION

The current study aimed to reveal the conditions that affect post-war aggression direction – inward, as manifested by sui-

dal ideation vs. outward, as manifested by partner violence. We conducted this study using the *two stages model of countervailing forces* proposed by Plutchik et al. (1989) for predicting inward and outward aggression. The results showed that aggressive impulses were related to suicidal ideation only in the presence of PTSD and of high guilt. Interestingly, high paranoid ideation buffered the effect of both PTSD and guilt on suicidal ideation. Regarding partner violence, a picture emerged that was different than what was expected. The main finding was that aggressive impulses were positively related to partner violence, only under the condition of low guilt and in the absence of PTSD.

Inward Directed Aggression— Suicidal Ideation

As we expected aggressive impulses predicted suicidal ideation, although only in the presence of either PTSD or high guilt. The role of high aggression in suicidality has been acknowledged by several previous studies. For example, in a study by Keilp et al. (2006) among depressed subjects, aggressiveness was the main player in distinguishing between those who attempted suicide and controls.

To the best of our knowledge this is the first study that exemplifies the moderation effect of PTSD on the association between aggressive impulses and suicidal ideation. This finding adds an additional layer to the vast literature linking PTSD and suicidality (cf., Krysinaka & Lester, 2010). Individuals with PTSD suffer from high psychological distress, manifested in prolonged arousal and intrusion symptoms. We suggest that it is both the distress as well as the emotional dysregulation components immanent in PTSD that pave the way for the aggressive impulses to be manifested as suicidal ideation.

The moderation effect of guilt on the association between aggressive impulses

and suicidal ideation is in line with other studies that pointed to the link between guilt and suicidality in populations of veterans (Hendin & Haas, 1991). In a recent study conducted on military personal, it was found that guilt and suicidality were related only among military personal who experienced combat exposure and not among military personal who did not experience combat (Bryan, Ray-Sannerud, Morrow, & Etienne, 2013). Lifton (1973) suggested that combatants often suppress feelings of guilt during combat in order to protect themselves psychologically and physically; however, this repressed guilt tends to increase dramatically when the war ends. He then referred to guilt as “perceptual killing of the self.” Our results suggest that the conjoint aggressive impulses, lingering from the war, and the combatants’ feelings of guilt, leads to suicidal ideation, possibly the expression of “self-lacerating” that is captured by Lifton’s observations.

Beyond our hypotheses, we found that paranoid ideation moderated the association between guilt and suicidal ideation and between PTSD and suicidal ideation. We suggest that the ability to direct attention outward and to express negative feelings towards others has important regulatory function, which buffers the transition from emotional distress (manifested in PTSD and guilt) to suicidal ideation. This possible explanation goes in line with recent works, highlighting the link between interpersonal experiences and affect regulation (e.g., Zaki & Williams, 2013). Thus, involvement in the interpersonal world, even though it might evoke negative attitudes and emotions, enables reduction in internal distress and in manifestations of inwardly directed aggression.

Outwardly Directed Aggression

While we expected aggressive impulses to predict partner violence, especially in the

presence of PTSD and paranoid ideation, we found that it is only in the absence of PTSD that aggressive impulses predict partner violence. This finding is surprising, in light of numerous studies that have shown a strong link between PTSD, anger, and violence (e.g., Taft et al. 2009); however it could be understood if we consider the specific characteristics of PTSD in our unique sample of veterans. Yom-Kippur war was perceived in Israel as destructive and traumatic, and was followed with collective feelings of defeat (Solomon, 1993). Possibly, this atmosphere set the stage for introverted rather than extroverted manifestations of distress. Indeed, a previous study with our data revealed very high co-morbidity between PTSD and depression compared to other samples of veterans (Itzhaky, Lavin, Fingerhut, & Solomon, 2014). Indicating that veterans with PTSD in our sample tend to be more introverted and to show internalizing rather than externalizing problems; this could explain the role of PTSD in moderating the association between aggressive impulse and suicidal ideation, but not partner violence. Although it was not tested in the current study, we speculate that the presence of co-morbid PTSD and depression, play a major role in the direction of aggression inward toward the self, and buffer the direction of aggression outward—toward others.

Additionally, we found that aggressive impulses predicted partner violence only under the condition of low guilt. This was in fact a mirror image to the moderation effect of guilt in suicide ideation. We suggest that guilt as an expression of internalized morals, prevents the outward expression of aggressive impulses. Drawing on Lifton's (1973) conceptualization suggesting that highly aggressive acts during war are possible as a result of the detachment and desensitization mechanisms combatants use to avoid feelings of guilt, we suggest that in certain cases it may be that

this mechanism continues into post-war life, affecting partner violence.

Our hypothesis regarding the moderation effect of paranoid ideation on the association between aggressive impulses and partner violence was not supported. This finding is not surprising when taking into consideration the contradictory findings in the literature regarding the link between paranoid ideation and violence (i.e., Appelbaum et al., 2000; Pérez & Martínez, 2012). The current study's results further indicate the complexity of the concept of paranoid ideation as well as its relation to guilt. Results showed an unexpected interrelation between guilt and paranoid ideation, such that only positive relations between the two (both are high, or both are low) increased the association between aggressive impulses and partner violence. This may be understood if we perceive guilt and paranoid ideation as experiences that have mutual amplification. Indeed, previous clinical observations on delusional paranoid patients revealed that paranoid content followed guilt (e.g., Gournellis et al., 2011). The authors referred to "guilt induced paranoia"—and suggested that feelings of guilt lead to the experience that one deserves to be punished and, as a result, paranoid content is induced (Lake, 2008). Our findings add to the literature regarding a shared common basis between paranoia and guilt, rather than the expected opposing nature.

This study has several limitations. First, the use of self-report measures, although very common in trauma studies, may entail reporting bias. This is especially true in regards to the measurement of aggression, which represented an under-reporting of aggression in relation to collateral reports (Moffitt, 1997) and specifically with regards to partner violence (LaMotte, Taft, Weatherill, Scott, & Eckhardt, 2013). Future studies should consider gathering data from multiple informants (e.g.,

participants' therapists), and use objective measures, such as observation of actual functioning. Second, the measurement of suicidal ideation as well as of paranoid ideation was taken from larger measures (SCL-90, DESNOS), and not from a targeted questionnaire designed to directly address suicide ideation (e.g., The scale for suicide ideation; Beck, Kovacs, & Weissman, 1979) or paranoid ideation (e.g., Green et al. Paranoid Thought Scales; Green et al. 2008). Although the short measures consisting of few items are commonly used and have demonstrated moderate reliability, future studies should utilize targeted questionnaires or structured clinical interviews (e.g., C-SSRS, Posner et al., 2011). Additionally, though suicidal ideation serves as a clear marker for suicide attempts (e.g., Wilkinson, Kelvin, Roberts, Dubicka, & Goodyer, 2011), and to completed suicide (e.g., Beck, Brown, Steer, Dahlsgaard, & Grisham, 1999), our findings can only be generalized to suicidal ideation and no other suicidal behaviours. Third, we used a cross-sectional design, so inferences about temporal sequence and causal relationships can only be hypothetical. Finally, the current study explored the links between aggressive impulses, PTSD, guilt, and paranoid ideation as predictors of suicidal ideation and partner violence, but did not include other important relevant factors, such as major depression, substance use and social support. These should be further explored in future studies.

The current study's findings hold significant clinical implications. The centrality of aggressiveness as a risk factor for both partner violence and suicidal ideation calls for attention and emphasis in the treatment of returning combatants. This could be achieved by assessing and monitoring aggressive impulses and the triggers that tend to evoke them. Treatment should provide tools to tolerate negative affect, to regulate impulses, and to express aggressive

feelings in adaptive and acceptable ways. To the best of our knowledge there has been only a few empirical investigations of interventions designed to decrease aggression among veterans (cf., Dunford, 2000), though some preliminary data suggest the possible benefit of anger reduction interventions (Chemtob et al., 1997). Furthermore, in light of the growing interest in aggression post-war and the reports of high rates of violence and suicide among war combatants from different countries (e.g., Jakupcak et al., 2011; Sontag & Alvarez, 2008), it seems increasingly important to conduct more comparative and simultaneous assessments of these behaviors in military and veteran populations. Identifying the factors that affect the direction of posttraumatic aggression (such as guilt and paranoid ideation) could promote the creation of specific and effective prevention and intervention programs, which could ultimately assist in leading to enhanced services provided for military veterans and their families.

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