Post – Traumatic Stress Disorder and Somatic Complaints in Relation to Psycho-Social Resources*

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Abstract

There is little question anymore about the reality of Post- Traumatic Stress Disorder(PTSD) as a disorder. For some, this disorder progressively worsens over time and appears to affect nearly all aspects of life, including work, interpersonal relationships, physical health, and view of self. The severity of PTSD may lead to repeated hospitalizations over the years and may require ongoing outpatient treatment. Moreover, a resurfacing of previously controlled symptoms may appear with old age, as former victims become physically incapacitated, suffer losses, and lose social support systems.

So far as, no comprehensive effort has been made to determine the joint effects of a range of factors (e.g. combat exposure, locus of control and social support) on post-traumatic stress and somatic symptoms in a single study comprising of non-clinical samples of Iranian War veterans/combatants who had war exposure during Iran-Iraq conflict.

The results of the current study demonstrate that combat stress has potential long-lasting effects that leave soldiers emotionally vulnerable, resulting in post-traumatic stress disorder. The study also reveals the effect of combat stress on somatic complaints. The result regarding social support were in accordance with earlier findings about the positive effects of social support on psychological adjustment. The findings also revealed the importance of locus of control in the development of post-traumatic stress disorder. Participants with external locus of control, scored higher on PTSD and somatic complaints than participants with internal locus of control, interestingly, the hypotheses of an interaction between social support and locus of control were not confirmed. Number of methodological and conceptual problems imposed certain limitations on these conclusions.

Keywords: Stress, Combat Exposure, Locus of Control, Social Support

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Mental health professionals have experienced an influx of Vietnam combat veterans seeking relief from such problems as intrusive war related thoughts and images, recurrent combat nightmares and associated sleep disturbance, survival guilt, social isolation, and cultural alienation. These symptoms, often imbedded in or partially masked by apparent depression, generalized anxiety, substance abuse, or situational adjustment disorders, are characteristic of the disorder now labeled as combat-related post-traumatic stress disorder. Most individuals suffering from PTSD find intrusive recollections, highly distressing and in some cases tormenting.

The literature reveals that the last decade has seen a remarkable broadening of the concept of PTSD, which is now increasingly used not only to describe symptoms that follow combat trauma, rape, torture, and natural disasters, but also automobile accidents, acute medical illness, chronic medical disorders, exposure to community stress (e.g., toxic wastes) or job stress, exposure to those who have been traumatized. There is now little concern about the reality of PTSD as a disorder. For some, this disorder progressively worsens over time and appears to affect nearly every aspect of life, including work, interpersonal relationships, physical health, and view of self. The severity of PTSD may result in repeated hospitalizations over the years and may require ongoing outpatient treatment.

A few individuals seem to maintain a high level of PTSD symptoms for many years (Rundell, Ursano, & Hollowoy, 1989; Goldfeld, Mollica, & Pesavento, 1988) or to be functionally impaired for life (Elder & Clipp, 1988). Several studies have indicated that symptoms continue to persist for

decades, either unabated or in a waxing and waning pattern, in greater than 50% of severely traumatized victims (Zeiss & Dickman, 1989). In addition to PTSD symptoms, the most consistently documented psychopathology in those who had been severely traumatized has been chronic depression and generalized symptoms of anxiety (Kluznik, Speed, & Van Valkenburg,1986). Moreover, resurfacing of previously controlled symptoms may appear with old age, as former victims become physically incapacitated, suffer losses, and lose social support systems (Marcus & Rosenberg, 1989; Solomon, Benbenishty, & Mikulincer, 1988).

A shortcoming of most previous studies has been the tendency to determine the relationship between post-traumatic stress disorder and somatic complaints, with just one or two variables. Thus, researchers have tended to focus on factors such as combat exposure, locus of control and social support in isolation. So far, no comprehensive effort has been made to determine the joint effects of a range of factors (e.g. combat exposure, locus of control and social support) on post-traumatic stress and somatic symptoms in a single study comprising of non-clinical samples of Iranian War veterans/combatants who had exposure during eight year Iran-Iraq war. Further research is needed on this issue.

The present study was accomplished to study more comprehensively about post-traumatic stress disorder and somatic complaints in Iranian soldiers who participated the War by including in its purview, a wide range of psycho-social variables in a single study. Thus, this study was designed:

To find out the effects of combat exposure on PTSD and somatic complaints.

- To study the effects of locus of control on PTSD and somatic complaints.
- To examine the effects of perceived social support (qualitative) on PTSD and somatic complaints.
- To study the effects of various interactional combinations of combat exposure, locus of control and social support on post-traumatic stress disorder and somatic complaints.

Hypotheses

(A) Stressful events may affect health status in numerous ways, in part by producing psychological distress and negative affect, which then broadly influence disease susceptibility. It is evident that exposure to a traumatic event is associated with complaints of poor physical health.

Undoubtedly, a severe trauma, such as extensive torture, violent rape, or savage and life-threatening combat, will produce conspicuous PTSD in high percentage of individuals. Life time PTSD prevalence for these at risk groups begins at around 90% for the most brutalized of prisoners of war or the victims of sever, prolonged torture.

In the context of above observations it was hypothesized that:

- Post-traumatic stress disorder (PTSD) will be more in case of participants with high combat exposure than those with less combat exposure.
- Somatic complaints will be more in case of participants with high combat exposure than those with low combat exposure.

- (B) In the area of mental health, it has been found that people with internal locus of control suffered less from severe psychiatric disorder (Lefcourt, 1976), especially from chronic depression (Abramson, Seligman, & Teasdale, 1978). In the light of these findings, the following hypotheses were formulated:
- 1. PTSD in persons with internal locus of control will be less severe than those with external locus of control.
- Somatic complaints of participants with internal locus of control will be less severe than those with external locus of control.
- (C) A great deal of research has been conducted on the relation between social support, endurance under stress, and psychiatric disturbance. All of those researchers essentially tested the supposition that the absence of social support in stressful situations might increase the vulnerability of individuals to illness associated with exposure to stress (Hobfoll & Walfisch, 1984). Some claimed that the absence of social support is a stress factor in and of itself that may create psychological disturbances. Studies have actually shown that subjects with good deal of social support are less vulnerable to psychological disorder (Cohen & McKay, 1984; Holahan & Moos, 1981). Social support has been related to favorable mental health outcome following combat stress (Keane, Scott, Chavoya, Lamparski, & Fairbank, 1985).

In the light of these findings, it was hypothesized that:

- In combatants with high social support on returning home, the severity of PTSD will be less than those with low social support.
- 2. Somatic complaints will be less in combatants with high social support on returning home than those with low social support.
- (D) Lefcourt, Martin, & Saleh (1984) and Sandler & Lakey (1982) suggested that there was relationship between people's locus of control and the effectiveness of the social support they received. These researchers came to realized that social support was more effective in mediating stress among people with internal locus of control than those with external locus of control. Their explanation for this difference is that people with internal locus of control use the social support they receive instrumentally such as to obtain information that may help them overcome the stresses, whereas people with external locus of control use social support in a less instrumental manner.

On this basis, it was hypothesized that:

- Impact of social support on PTSD will be stronger for persons with internal locus of control than those with external locus of control.
- Impact of social support on somatic complaints will be stronger for persons with internal locus of control than in those with external locus of control.

Sample

Subjects in the present study included 320 Iranian males with experience of combat exposure during Iran-Iraq War (1980-1988). All participants selected, had served at least for 6 months in the

war-zone or its surrounding waters or airspace between 1980 and 1988.

The participants were between the age range of 25 to 40 years (Mean=30.35, S.D.=3.78). The majority of the respondents were married and had at least completed high school or college education. They were more or less residing in the same locality. Moreover, they belonged to middle class. Criteria for inclusion in the sample were:

- (a) participants who had experienced combat during the war;
- (b) participants with no indication of reactive psychosis or fictitious disorders;
- (c) participants with no referral for psychiatric intervention made by the soldier's battalion surgeon during the war;
- (d) no evidence of addiction.

The sample was delimited to participants who were available to participate in this study, thus, limiting the assumption of randomization.

Tests 1 Used

The following tests were used:

- (a) Measure of Post-Traumatic Stress Disorder
 The Impact of Event Scale Revised (IES-R: Weiss & Marmar, 1995).
- (b) Measure to Assess Combat Exposure
 The Combat Exposure Scale (CES: Keane,
 Fairbank, Caddell, Zimering, Taylor, & Mora,
 1989).

^{1.} The questionnaires were translated from English into Farsi by the author. The cooperation of two native speakers was also sought.

- (c) Measure of Locus of Control

 The Internal-External Scale (I-E Scale: Rotter,
 1966)
- (d) Measure of Social Support

 The Social Support Questionnaire (SSQ: Sarason,
 Sarason, Shearin, & Pierce, 1987)
- (e) Measure of Somatic ComplaintsThe Psychophysiologic (PP) Symptoms Scale(PPSS: Schonfeld, 1995).

Administration of Tests

The tests were administered in five sessions, following uniform sequence. In the first session, the Socio-Demographic Questionnaire along with the Impact of Event Scale - Revised (Weiss & Marmar, 1995) were administered. This was followed by the administration of Combat Exposure Scale (Keane at al., 1989) in the second session. The third session involved administration of the Rotter's Internal-External Scale (Rotter, 1966), whereas in the fourth session, participants filled the Social Support Questionnaire (Sarason et al., 1987).

In the final session, the Psychophysiologic Symptoms Scale (Schonfeld, 1995) was administered.

The tests were administered to participants individually. The general testing environment was satisfactory and sincere efforts were made first to establish rapport with the participants, in order to elicit reliable and authentic information. They were told in advance that the information was being collected purely for research purpose. They were also assured that the information to be collected would remain strictly confidential

and presented only in a form in which no person could be identified. The privacy policy and assurance appear to have gone a long way in eliciting reliable information since participants took great interest in filling different questionnaires. They showed no inhibition in filling different questionnaires.

The doubts of the subjects were completely removed before permitting them to take the test. Each form was checked to see if any omission was there and if so, the particular participant was asked to complete the left out question or questions.

Scoring of Tests

The tests were scored in accordance with the procedures followed by researchers of different tests. Handscoring was done using separate keys for respective tests used in the study.

Impact of Event Scale-Revised (IES-R) was scored for measure of post-traumatic stress disorder (PTSD). The Psychophysiologic Symptoms Scale (PPSS) was scored for somatic complaints.

The Combat Exposure Scale (CES) was scored for combat exposure measure. The Rotter's Internal-External Scale (I-E Scale) was scored for measure of locus of control. The Social Support Questionnaire (SSQ) was scored for two measures: Number of social support and social support satisfaction.

Thus, by scoring different tests, 5 measures as mentioned below were obtained:

(a) One measure of Post-Traumatic Stress Disorder (PTSD).

^{1.} This measure of social support was excluded from the main analysis because research in the recent past has shown that quantity of social support was not a relevant variable.

- (b) One measure of Somatic Complaints.
- (c) One measure each of Combat Exposure and Locus of Control.
 - (d) One measure of Social Support.

Analyses

The data were analyzed to obtain the following information:

- 1. Frequency distribution, mean, median, standard deviation, skewness, kurtosis for different variables (Tables 1 and 2).
- 2. Reliability coefficients of different measures (Table 3).
- 3. 2×2×2* Analysis of Variance (ANOVA) was employed to examine the effect of combat exposure, locus of control, and social support on post-traumatic stress disorder (PTSD), (Table 4).

In the first instance, 320 participants were classified into two groups based on combat exposure scale. This was done by using median as the cut off point. These two groups were further classified into two groups on the basis of locus of control resulting in four different groups as mentioned below:

- (a) High combat exposure Internal orientation
- (b) High combat exposure External orientation
- (c) Low combat exposure Internal orientation
- (d) Low combat exposure External orientation

These four groups were further split on the basis of scores on social support (qualitative) (Low vs. High). The following eight groups were:

- (a) High combat exposure Internal orientation– High social support.
- (b) High combat exposure-Internal orientation Low social support.
- (c) High combat exposure-External orientation – High social support.
- (d) High combat exposure–External orientation Low social support.
- (e) Low combat exposure—Internal orientationHigh social support
- (f) Low combat exposure Internal orientation Low social support.
- (g) Low combat exposure External orientation High social support.
- (h) Low combat exposure External orientation Low social support.

Post-Traumatic Stress Disorder was used as a dependent measure to ascertain the effect of combat exposure, locus of control and social support.

4. The above mentioned procedure was also followed for somatic complaints, as a dependent measure (Table 5).

^{1.} Combat exposure

^{2.} Locus of control

^{3.} Social support

Table 1 Frequency Distributions of Scores on Post-Traumatic Stress Disorder as Derived from Impact of Event Scale-Revised (IES-R)

Class Interval	f		
80-84	1		
75-79	1 2 4		
70-74			
65-69			
60-64	11		
55-59	13		
50-54	13		
45-49	16		
40-44	28 29 34 48		
35-39			
30-34			
25-29			
20-24	36		
15-19	31		
10-14	25 16		
5-9			
0-4	12		
N	320		
Mean	30.58		
Median	28.50 16.40		
S.D.			
Sk.	0.438		
Ku.	-0.133		

Somatic Complaints as Derived from

Psychophysiologic Symptoms Scale.

Class Interval	f		
52-55	3		
48-51	0		
44-47	8		
40-43	7		
36-39	8		
32-35	14		
28-31	16		
24-27	19		
20-23	25		
16-19	30		
12-15	38		
8-11	43		
4-7	61		
0-3	48		
N	320		
Mean	15.28		
Median	12.50		
S.D.	12.30		
Sk.	0.907		
Ku.	0.149		

Table 3 Reliability Coefficients of Different Measures (N:125)

S.No.	Measures	Rtt
, 18/1	Social Support Questionnaire	0.910
2.	Psychophysiologic Symptoms Scale	0.896
3.	Impact of Event Scale-Revised	0.881
1.	Combat Exposure Scale	0.865
5. Black	Internal-External Scale	0.616

Table 4 Analysis of Variance Results for Measure of Post-Traumatic Stress Disorder as a Function of Combat Exposure, Locus of Control and Social Support

Source	SS	df	MS	F	Level of Significance
Combat Exposure (CE)	8332.07	1	8332.07	37.35	0.001
Locus of Control (LOC)	1596.60	1	1596.60	7.15	0.001
Social Support (SS)	2839.92	1	2839.92	12.73	0.001
CE × LOC	174.77	1	174.77	0.78	mos 16 mos
CE × SS	68.42	1	68.42	0.30	sever out ul
LOC × SS	63.89	1	63.89	0.28	The state of the s
CE × LOC × SS	180.98	1	180.98	0.81	ralomeo with
Within	66590.64	312	223.04	378	

Table 5 Analysis of Variance Results for Measure of Somatic Complaints as a Function of Combat Exposure, Locus
of Control and Social Support

Source	SS	df	MS	F	Level of Significance
Combat Exposure (CE)	2665.27	1	2665.27	19.96	0.001
Locus of Control (LOC)	1372.65	1	1372.65	10.28	0.001
Social Support (SS)	1153.75	1	1153.75	8.64	0.001
CE × LOC	4.51	1	4.51	0.03	F-1-
CE × SS	7.94	1	7.94	0.06	-
LOC × SS	75.51	1	75.51	0.56	_
CE × LOC × SS	19.80	1	19.80	0.14	
Within	41647.03	312	133.48		

Conclusions

Participation in combat put soldiers under intense pressures that could impair their functioning. The most widespread manifestation of psychopathology on the battlefield is combat stress reaction (CSR), also known as battle shock and battle fatigue. CSR is characterized by psychomotor retardation, withdrawal, increased sympathetic activities, stuttering, confusion, nausea, vomiting, and paranoid reactions. The common element in all of these varied manifestations is that soldiers cease to function efficiently, from a military viewpoint and may even endanger themselves and their comrades.

The results of the current study demonstrates that combat stress has potential long-lasting effects that leave soldiers emotionally vulnerable, resulting in post-traumatic stress disorder. As hypothesized, associations were found between amount of combat stress and PTSD intensity. Study also reveals the effect of combat stress on somatic complaints.

The result regarding social support were consistent and in accordance with earlier findings

about the positive effects of social support on psychological adjustment (e.g., Holahan & Moos, 1981; Wilcox, 1981). High levels of perceived social support appeared to minimize post-traumatic stress disorder. However, essential to note that social support measure used in the study reflected the subjective perception of social support rather than its objective existence. Whereas, some researchers have noted that perceived social support is what is important (Henderson, Byrne, & Duncan-Jones, 1981), others have argued that this confounds the environmental nature of social support (i.e., its objective existence) with personal attributes that affect perceptions. Future research should make an effort to determine the most effective components of support. The findings also reveals the importance of locus of control in the development of post-traumatic stress disorder. Participants with external locus of control scored higher on PTSD and somatic complaints than those with internal locus of control. Interestingly, the hypotheses of an interaction between social support and locus of control were not confirmed.

Although, the cross-sectional data indicated a significant link between PTSD intensity on one hand and personal and social resources on the other, the direction of causality was unclear.

A number of methodological and conceptual problems imposed certain limitations on these conclusions. One, because the participants had PTSD or somatic complaints prior to the start of the study, as such the findings could not provide definitive evidence as to the direction of causality between resources and PTSD or somatic complaints.

Second reason for the difficulty in implying a casual ordering resides in the nature of the measurement of personal and social resources. Among soldiers suffering from PTSD, personal and social resources were "retrospective" assessments based on the knowledge that one has psychiatric complications following exposure to a massive stressor. These soldiers may try to justify their psychiatric difficulties, searching for their inability to cope. Unfortunately, this is the case with most research on the stress-illness process.

The strengths of this study however are in its large sample size and its investigation of the effects of a catastrophic stress (the Iran-Iraq War), in relation to social support and locus of control on PTSD. Future research on the relation of personal and social resources with PTSD intensity or somatic complaints would d etermine whether different types of massive stressors modify that relationship. It will also be of an immense interest to test that relation in different populace, particularly among veterans who developed without PTSD delayed combat-related

experiencing psychological breakdown during the battle.

References

- [1] Abramson, L.Y., Seligman, M.E., & Teasdale, J.D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87, 49-74.
- [2] Cohen, S. & Mckay, G. (1984). Interpersonal relationships as buffers of the impact of psychological stress on health. In Baum, A., Singer, J.E., & Taylor, S.E. (Eds): Handbook of psychology and health. Hillsdale, NJ: Erlbaum.
- [3] Elder, G.H. & Clipp, E. (1988). Wartime losses and socail bonding: Influence across 40 years in men's lives. *Psychiarty*, 51, 177-198.
- [4] Goldfeld, A.D., Mollica, R.F., & Pesavento, B.H. (1988). The physical and psychological sequelae of torture: Symptomatology and diagnosis. Journal of the American Medical Association, 259, 2725-2729.
- [5] Henderson, S., Byrne, P.G., & Duncan Jones, P.(1981). Neurosis and the social environment. New York: Academic Press.
- [6] Hobfoll, S.E. & Walfisch, S. (1984). Coping with a threat of Life: A longitudinal study of self-concept, social support, and psychological distress. American Journal of Community Psychology, 12, 87-100.
- [7] Holahan, C.J. & Moos, R.H. (1981). Social support and psychological distress: A longitudinal analysis. *Journal of Abnormal Psychology*, 90, 365-370.
- [8] Keane, T.M., Scott, W.O., Chavoya, G.A., Lamparski, D.M., & Fairbank, J.A.(1985).

- Social support in Vietnam veterans with posttraumatic stress disorder: A comparative analysis. *Journal of Consulting and Clinical Psychology*, 53, 95-102.
- [9] Keane T.M., Fairbank, J.A., Caddell, J.M. Zimering, T.R., Taylor, K.L., & Mora, C.A.(1989). Clinical evaluation of a measure to assess combat exposure. *Journal of Consulting* and Clinical Psychology, 1, 53-55.
- [10] Kluznik, J.C., Speed, N., & Van Valkenburg, C. (1986). Forty-year follow-up of United States prisoners of war. American Journal of Psychiatry, 143, 1443-1446.
- [11] Lefcourt, H.M. (1976). Locus of control: Current trends in theory and research. New York: Halstead Press.
- [12] Lefcourt, H.M., Martin, R.A., & Saleh, W.E.
 (1984). Locus of control and social support:
 Interactive moderators of stress. Journal of
 Personality and Social Psychology, 47, 378-389.
- [13] Marcus, P. & Rosenberg, A. (1989). Healing their wounds: Psychotherapy with Holocaust survivors and their families. New York: Praeger Press.
- [14] Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, (Whole No. 609).
- [15] Rundell, J.R., Ursano, R.J., & Holloway, H.C. (1989). Psychiatric responses to trauma. Hospital Community Psychiatry, 40, 68-74.

- [16] Sandler, I.N. & Lakey, B.(1982). Locus of control as a stress moderator: The role of control perceptions and social support. American Journal of Community Psychology, 10, 65-80.
- [17] Sarason, I.G., Sarason, B.R., Shearin, E.N., & Pierce, G.R. (1987). A brief measure of social support: Practical and theoretical implication. *Journal of Social and Personal Relationships*, 4, 497-510.
- [18] Schonfeld, I.S. (1995). The psychophysiologic symptoms scale (PPSS). City college of New York, NY 10031.
- [19] Solomon, Z., Benbenishty, R., & Mikulincer, M. (1988): A follow-up of the Israeli causalities of combat stress reaction (battle shock) in 1982 Lebanon war. British Journal of Clinical Psychology, 27, 125-135.
- [20] Weiss, D.S. & Marmar, C.R. (1995). The Impact of Event Scale-Revised. PTSD Program, San Francisco VA Medical Center, CA.
- [21] Wilcox, B. (1981). Social support, life stress and psychological adjustment: A test of the buffering hypothesis. *American Journal of Community Psychology*, 9, 371-386.
- [22] Zeiss, R.A. & Dickman H.R. (1989). PTSD 40 years later: Incidence and person-situation correlates in former POWs. Journal of Clinical Psychology, 45, 80-87.

اختلال تنیدگی پس ضربهای و شکایات جسمی در ارتباط با منابع روانی - اجتماعی

سعید عسکری'

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امروزه دیگر دربارهٔ واقعیت اختلال تنیدگی پس ضربهای پرسشی وجود ندارد. این اختلال در برخی از افراد به مرور زمان به طور فزایندهای بدتر می شود و به نظر می رسد که تقریباً تمام ابعاد زندگی شخص را شامل کار، روابط بین فردی، سلامت جسمی و دیدگاه فرد دربارهٔ خویش را تحت تأثیر قرار می دهد. شدت اختلال تنیدگی پس ضربهای ممکن است منجر به بستری شدنهای مکرر در طی سالیان متمادی و نیز موجب درمان سرپایی مستمر گردد. به علاوه نشانه های کنترل شده قبلی اختلال ممکن است با کهولت سن ظاهر شود، به گونه ای که مبتلایان به لحاظ جسمی ناتوان، دچار نقصان و از دست دادن سیستمهای حمایت اجتماعی گردند.

چنین به نظر می رسد که تلاش وسیعی برای تعیین تأثیرهای ترکیبی گسترهای از عوامل (برای مثال، مواجهه با جنگ، منبع مهار و حمایت اجتماعی) بر روی اختلال تنیدگی پس ضربهای و شکایات جسمی در مطالعهای واحد که دربرگیرندهٔ نمونههای غیر بالینی مجروحان و رزمندگان جنگ تحمیلی که در میدانهای نبرد حضور داشته اند، صورت نگرفته است.

نتایج پژوهش حاضر نشان داد که تنیدگی نبرد، آثار طولانی مدت بالقوهای دارد که می تواند موجب صدمه هیجانی و منجر به اختلال تنیدگی پس ضربهای شود. این مطالعه نیبز اثبر تنییدگی نببرد را ببر روی شکایات جسمی آشکار ساخت. نتایج پژوهش در ارتباط با حمایت اجتماعی با یافته های مطالعات پیشین دربارهٔ تأثیرهای مثبت حمایت اجتماعی بر سازگاری روان شناختی، همخوانی داشتند. یافته های پژوهش همچنین اهمیت منبع مهار را در تحول اختلال تنیدگی پس ضربهای مشخص ساختند. آزمودنیهایی که واجد منبع مهار بیرونی بودند در اختلال تنیدگی پس ضربهای و شکایات جسمی نمره بیشتری گرفتند. نکته جالب توجه دیگر آن که فرضیههای مربوط به تعامل بین حمایت اجتماعی و منبع مهار تأیید نشدند. در هر حال، پارهای از مشکلات مفهومی و روش شناختی محدودیتهای ویژهای را دربارهٔ استنتاج از این پژوهش، مطرح میسازند.

واژگان کلیدی: تنیدگی، مواجهه با نبرد، منبع مهار، حمایت اجتماعی

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