

PTSD Symptomatology and Social Anxiety Among Retired Army Officers: Mediating Role of Internalized Shame

Gulyana Shehzad, Sadaf Ahsan, and Saadiya Abbasi

Foundation University Islamabad

The present study was conducted to analyze the mediating role of internalized shame in the relationship between post traumatic stress disorder symptoms and social anxiety among retired army officers. A sample of 200 male retired army officers aged 45-75 years with minimum education of 14 years was collected through purposive convenient sampling technique. Self-reported measures, including Post Traumatic Stress Disorder Checklist-5 (Weathers et al., 2013), Internalized Shame Scale (Cook & Coccimiglio, 2001), and Social Interaction Anxiety Scale (Mattick & Clarke, 1998) were administered for data collection. Results yielded internalized shame and post traumatic stress disorder symptoms as significant positive predictors of social anxiety. Moreover, internalized shame significantly mediated the relationship between post traumatic stress disorder symptoms and social anxiety. The current study would help to enhance knowledge about the influence of traumas/ disasters on retired army officers and the subsequent problems that might emerge because of the existing problem, in turn affecting the positive post-traumatic growth.

Keywords. Internalized shame, social anxiety, post-traumatic stress disorder symptoms, retired army officers

The exploration was directed to examine the mediating role of internalized shame among the association of PTSD symptoms and social anxiety amongst retired army officers. Experiential evidence

Gulyana Shehzad, Sadaf Ahsan and Saadiya Abbasi, Department of Psychology, Foundation University, Islamabad, Pakistan.

Correspondence concerning this article should be addressed to Gulyana Shehzad Department of Psychology, Foundation University, Islamabad, Pakistan. E-mail: gulyanashehzad@yahoo.com

The earlier version of this article has been presented in the 7th International conference titled "Positive Psychology: Developing A Flourishing Community" (November 29-30, 2018) organized by National Institute of Psychology, Quaid-i-Azam University, Islamabad.

showed that having more often exposed to traumatic events would lead to an increase in psychological issues among people (Furmark, 2002). In addition, army officers are additionally prone to upsetting happenings (Hoge et al., 2002; Kaiser et al., 2017). Retired army officers experienced disturbances during service and after retirement, and having more exposure to stress-provoking events would lead to a higher prevalence of psychological issues, for example, post-traumatic stress disorder (PTSD), social anxiety, internalized shame, and depression (Budden, 2009).

A psychological illness that occurs because of an undergoing or viewing a drastic incident is known as Post Traumatic Stress Disorder (Yehuda, 2002; Yehuda et al., 2015). PTSD consists of symptoms like fear of re-experiencing the event, dodging impetuses related to trauma, adverse feelings, and the demonstrative state, reactivity, and provocation connected to a traumatic event (American Psychiatric Association [APA], 2013); whereas, social anxiety is termed as an unreasonable and extreme fear of coming across to new circumstances or handling unknown people (APA, 2013). Internalized shame is a kind of communal anxiety in which a person thinks inferior to her or his performance, physique, and appeal. For the first time in DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, 5th edition), adverse states of sentiments were declared as the signs of PTSD, and this list comprises shame (APA, 2013). One reason for shame arousal could be experiencing violence, and it is professed as damage to oneself, and it is also linked with danger to one's status or social appeal (Budden, 2009; Lee, Scragg, & Turner, 2001).

Empirical evidence shows that PTSD symptoms, social anxiety, and internalized shame are highly comorbid (Armenian et al., 2000; Brewin, Andrews, & Valentine, 2000; Collimore, Carleton, Hofmann, & Asmundson, 2010; Frueh, Turner, Beidel, & Cahill, 2001). The study conducted in Pakistan showed the prevalence of PTSD in burn victims, and 69 percent of prevalence was reported (Waqas et al., 2018). A study on acid burn victims in Pakistan indicated negative association between PTSD and resilience (Bibi, Kalim, & Khalid, 2018).

Relationship Between PTSD Symptomology, Social Anxiety, and Internalized Shame

Underprivileged home coming greetings are designated to be an essential forecaster of post-traumatic stress disorder, and it is more impacting than events related to combat itself (Jakupcak et al., 2007). Researchers highlighted a higher comorbidity level among PTSD and social anxiety in Pakistan (Waqas et al., 2018). Being socially isolated

is a mutual attribute of both social anxiety and PTSD. Those with social anxiety show direct evading of social communication, and those with PTSD show avoidance through emotional state of hostility from others and the lessen aptitude to sense sentiments (APA, 2013). The inability to deal with social support correctly might lead to feelings of depression and loneliness among the veterans who are diagnosed with PTSD (Bibi et al., 2018; Kulka et al., 1990). A research carried out in Pakistan reported that victims of the traumatic event show positive outcomes like resilience etc. when they receive social support. However, they reported higher intrusion and avoidance and PTSD overall (Bibi et al., 2018).

Individuals having feelings and thoughts of shame possess a discerning understanding of the circumstances and persons surrounding them and the infuriation they experience about others, develop a hedge between safeguarding the sustenance of them and others (Blum, 2008). Researchers indicated that one of the prime responses to a common hazard or trauma is feelings of shame, fear of breaching social rules, norms and regulations leads to the expansion of shame and social anxiety (Gilbert, 2007). The presence of shame and social anxiety can alter the perception of self (Andrews et al., 2002). Social anxiety is more commonly correlated with internal shame than external shame, as an inability to approve oneself leads to disapproval from others (Arditte, Morabito, Shaw, & Timpano, 2016; Clark & Wells, 1995; Gilbert & Trower, 2001).

Empirical evidence identifies a strong association amid social anxiety and shame (Gilbert, Pehl, & Allan, 1994). Social anxiety is meaningfully related with shame because of exposure to military-related drastic events and difficulty military personal experiences when they return home after a combat clash. Studies on Vietnam veterans showed that veterans might be mainly vulnerable to the negative effect of the deficit of social nourishment they experience at home (Drescher et al., 2011). Moreover, Orsillo et al. (1996), while studying the association between social anxiety/phobia, specified that veterans of combat with the diagnoses of PTSD were sturdily more possibly adopt a supplementary judgment of social phobia that is seventy-two percent. In comparison to personnel who didn't fulfill the prevailing standards for PTSD, that is twenty-two percent.

Literature review indicates PTSD as a strong predictor of symptoms of shame (Beck et al., 2015; Dewey, Schuldberg, & Madathil 2014; Hathaway, Boals, & Banks, 2010; Van Minnen, Harned, Zoellner, & Mills, 2012). Empirical evidence shows a strong association of shame experience with an emotive state of falseness and infidelity, which in turn, cultivate altering self-depreciation

(McCormack & Joseph, 2013). A study (Stein et al., 2012) was conducted on participants of two military operations, which were Operation Iraqi Freedom, and Operation Enduring Freedom employing sample of male serving personnel. Findings of the study yielded that there was a strong association between regrets for doing something wrong, pre-conception against oneself, and the mortal wound caused because of these thoughts created by the individual himself. It is additionally associated with the expressive state of shame and a higher level of confrontation to pardon oneself. Moral injury caused by oneself appeared to be a strong predictor of PTSD symptoms. The explorations recognized that thoughts challenging with person's earlier views related to one self might harvest unwelcome disruptions. One hundred eight researches were reviewed for a meta-analysis indicated that a strong association existed between shame, desperateness, helplessness, hopelessness, insufficiency, and self-depreciation (Kim, Thibodeau, & Jorgensen, 2011).

Symptoms of PTSD are further strengthened by loneliness. PTSD's symptoms, that is, avoidance and evading actions, can lead to the development of emotional distress, conflict of cognitions, drug abuse, disassociation, suicidal thoughts, devastating thoughts, feelings of dejection, and actions in response to obsessions (Andrews, Qian, & Valentine, 2002). Veterans of combat tend to score higher on shame, along with the diagnosis of PTSD. Moreover, Vietnam Veterans scored higher on the sub-factors of alienation and inferiority as assessed by researchers while researching 47 patients of the psychiatric ward (Wong & Cook, 1992). Therefore, comorbidity of shame and PTSD can strengthen the sternness of loneliness and evasion (Mason et al., 2001; Ranganadhan & Todorov, 2010).

Mediating Role of Shame between PTSD Symptoms and Social Anxiety

Abundant empirical evidence supported that sexual abuse and interpersonal violence tends to be a strong predictor of shame (Amstadter & Vernon, 2008). Moreover, comorbidity exists among mental health issues and feelings of shame (Aakvaag et al., 2016; Andrews, Brewin, Rose, Kirk, & Strauss, 2000; Beck et al., 2011; La Bash & Papa, 2014; Zafar, Khan, Siddiqui, Jamali, & Razzak, 2016). In DSM-V, the diagnostic criteria of PTSD contain a symptom, i.e., the adverse thoughts and moods about the one-self (i.e., shame) that might be caused because of exposure to the upsetting event (APA, 2013). Shame, as defined by Gilbert (2007), is a drastic emotional state that might echo the person's certainty that people in their

communal surroundings might analyze them as persons with adverse personal characteristics and attributes or as having indulged in undesirable activities. Shame tends to provoke withdrawal conduct and communal separation, indicating that whenever persons come across feelings of shame, they incline to pull back from their societal associations, therefore hypothetically manipulating the level of their social sustenance (Nathanson, 1992; Wilson et al., 2006).

The response of the social group of individuals toward his character and behavior tends to indicate whether it will result in feelings of shame or satisfaction. Undesirable comebacks to an individual because of being a prey of fierceness from their sustenance network are inappropriately very common and might cause fighters to develop feelings of shame (Hershkowitz, Lanes, & Lamb, 2007; Ullman, 1999). In parallel to the findings mentioned above, evidence presented that there is a robust connection amongst shame and adverse expectations concerning social provision, counting the degree to which arrangement is well thought to be helpful (Dodson & Beck, 2017).

It is an essential demand of time and would be beneficial to study the mechanisms by which psychological problems might be initiated in an individual. Consequently the main aim is that the indications can be handled through effective intrusions. Studying PTSD, social anxiety and internalized shame is of great importance due to following reasons. First, welfare and eminence of life are momentarily contributed by the nonappearance of psychological difficulties (Hoge et al., 2006; Velotti, Garofalo, Bottazzi, & Caretti, 2017; Zafar et al., 2016). Second, for post-trauma retrieval, greater stages of communal care / satisfaction, self-appraisal, and better coping strategies offer resilience and flexibility, and lack of these qualities lead toward the prevalence of psychological problems (Nawaz, Khalily, & Gul, 2018; Waqas et al., 2018).

Third, problems related to society, counting anxieties and feelings of shame, persuaded to be the main features of PTSD (Nawaz et al., 2018). Fourth, these variables, while existing together or in solitary, can harm society altogether, hence, it is need of time to investigate in the context of indigenous perspective (Aslam & Kamal, 2016). Finally, studies recommended analyzing shame in differential conceptual frameworks (Velotti et al., 2017). Therefore, the present research was carried out to include all these variables (i.e., PTSD symptoms, social anxiety, and internalized shame) in one study and thoroughly examine the role of each factor in association to elaborate the mechanism of cause and effect.

Method

Hypotheses

1. There is positive relationship between internalized shame, PTSD symptoms, and social anxiety among retired army officers.
2. Internalized shame and PTSD symptoms positively predict social anxiety among retired army officers.
3. Internalized shame mediates the relationship between PTSD symptoms and social anxiety among retired army officers.

Sample

Sample of 200 retired army officers was collected through purposive convenient sampling from Rawalpindi and Islamabad. The age range of participants was 45 to 75 years ($M = 54.96$, $SD = 5.56$). A criterion of 14 years of education was adopted, thus ranging from 14 years of education to 21 years of education ($M = 17.6$, $SD = 7.22$). Sample comprised of Major ($n = 53$, 26.8%), Lt. Col ($n = 74$, 43.9%), Col ($n = 34$, 14.1%), and Brigadier ($n = 37$, 15.2%) retired officers. Officers living in nuclear ($n = 100$, 50.5%) and joint family system ($n = 98$, 49.5%) were almost equally represented in the present study. Officers sustaining any life-threatening disease were not encompassed in the sample as per the criteria for PTSD in DSM-V.

Instruments

A demographic sheet, along with the following measures, was used to obtain information.

Post-traumatic Stress Disorder Checklist (PCL-5). Based on Diagnostic Statistical Manual-5 (DSM-5), PCL-5 (Weathers et al., 2013), was used in the study to measure PTSD symptoms. The scale contained 20 items based on signs and indicators of PTSD. Participants selected the degree to which they have been bothered by each symptom and signs during the last one month. It utilized a 5-point Likert scale, ranging from *not at all* = 0 to *extremely* = 4. The total score of scale could be obtained by adding up the score of each of the 20 items with possible score range of 0-80 while, cut-off score was 33. Scores were acquired by rendering to the clustering of manual, that is, Cluster-B: Intrusion symptoms (items 1-5); Cluster-C: Avoidance (items 6-7); Cluster-D: Negative alterations of cognition and mood (items 8-14), and Cluster-E: Alteration in arousal and reactivity (items 15-20). The scale could be used for individuals of 18 years of age and above. The internal reliability of the scale acquired in

the present study was .92, which was attained utilizing the Cronbach alpha coefficient. Durable internal consistency was also assessed in previous studies such as Weathers et al. (2013) reported the reliability of .94 for the scale.

Internalized Shame Scale (ISS). Internalized Shame Scale (Cook & Coccimiglio, 2001) was administered to assess internalized shame. It consisted of a total of 30 items, whereas, 24 items were negatively phrased designated to assess internalized shame. In contrast, remaining 6 statements were positively phrased and were derived from Rosenberg Self-esteem Scale (1965) used as fillers. Each item was scored on the 5-point Likert scale, ranging from *never* = 1 to *almost always* = 5 with possible score range of 24-120. However, total internalized shame was scored after excluding 6 items of self-esteem. The score above cut off 50 was considered as indicative of presence of internalized shame at clinical levels and score above 60 exhibited risky level of internalized shame. A test-retest association, as evaluated by Cook and Coccimiglio (2001) was .84 and .79, correspondingly; while, reliability of the ISS for the current study was attained as .89.

Social Interaction Anxiety Scale (SIAS). Social Interaction Anxiety Scale (Mattick & Clarke, 1998) assessed anguishes while talking and meeting others that are known as social anxiety. Total number of statements in the questionnaire were 20 and responses were acquired on 5-point Likert scale, vacillating from *not at all* = 0, to *extremely* = 4. In addition, three negatively phrased items were later reverse scored; thereby generating total score range of 0 to 80 with 43 as cut-off score for social anxiety. Alpha reliability coefficient of the scale attained in the present study was .86.

Procedure

Data was collected through the administration of scales upon the retired army officers from Islamabad and Rawalpindi. The participants were approached for data collection in their residential areas. The residential area was selected which was particularly specified for retired officers, for example, *Askari*. Informed consent was taken from each officer, and they were assured that confidentiality would be strictly maintained. Participants were briefly told about the content of research. After giving proper instructions to partakers, they were asked to fill the demographic sheet and questionnaires for each variable. This process was carried out on one to one basis and queries were appropriately answered while administering the scales.

Results

To attain the results, the following analyses were applied. Correlation analysis was conducted to determine the association among variables, while, regression analysis was carried out to measure the effects produced by respective variables. Besides, a hierarchical regression investigation was conducted to examine the mediating role of internalized shame in association with PTSD symptom and social anxiety.

Table 1

Correlation Among Social Anxiety, PTSD Symptomatology and Internalized Shame (N=200)

Variables	1	2	3	M	SD
1. Social Anxiety	-	.39*	.56*	11.02	8.86
2. PTSD Symptomatology		-	.64*	9.9	7.6
3. Internalized Shame			-	39.0	10.6

* $p < .01$.

Findings of correlation analysis presented in Table 1 indicated that social anxiety is found to be significantly positively associated to PTSD symptoms and internalized shame. Further, a significant positive correlation is also found between PTSD symptomatology and internalized shame. The findings of this analysis tend to support hypothesis number 1 of the study, which stated a positive association among these variables.

Table 2

Social Anxiety Predicted by PTSD Symptomatology and Internalized Shame (N= 200)

Predictors	B	SE	β	t	p	R ²	Adj.R ²
Constant	28.18	4.05					
PTSD Symptom.	7.72	.79	.39*	5.99	.00	.16	.15
Internalized Shame	.48	.05	.58*	9.91	.00	.33	.32

Note. Symptom. = Symptomatology.

* $p < .01$.

Results given in Table 2 showed that PTSD symptomatology significantly predicted social anxiety in positive direction and accounted for 16% of variance in social anxiety. Similarly, internalized shame also significantly predicted social anxiety in positive direction causing 33% of variance in it. Findings revealed that both PTSD symptoms and internalized shame are significant

predictors of social anxiety. These findings provide support for the postulated hypothesis number 2.

Hierarchical regression is tabulated to determine mediating role of internalized shame. As per criteria of Baron and Kenny (1986), firstly, PTSD symptoms significantly positively predicted social anxiety; secondly, PTSD symptoms also significantly positively predicted internalized shame; and thirdly, internalized shame significantly affected social anxiety ($p < .01$). Therefore, internalized shame is introduced as a mediator in the relationship between PTSD symptoms and social anxiety (See Table 3).

Table 3

Hierarchical Regression Analysis of PTSD Symptoms and Internalized Shame on Social Anxiety (N=200)

Model	B	SE	β	t	p	R ²	ΔR^2
Step I							
Constant	7.72	.79		9.76	.00		
PTSD	.33	.05	.39	5.99	.00	.16	.14
Step II							
Constant	-5.73	1.98		-2.89	.00		
PTSD	.03	.06	.04	.55	.58		
Internalized Shame	.46	.06	.55	7.27	.00	.34	.18

Note. PTSD = Post-traumatic stress disorder Symptoms.

Table 3 presented that the value of the coefficient of the association amid PTSD symptoms (predictor) and social anxiety (criterion) was significantly higher in Step 1 ($\beta = .39, p < .00$). But it has become significantly low in Step 2 when internalized shame (mediator) entered into the analysis ($\beta = .04, p > .05$). This direct relationship between predictor (PTSD symptoms) and criterion (social anxiety) also becomes non-significant at Step II after entering mediator (internalized shame) in the model. The value of the Sobel-t test (7.68, $p < .00$, SE = .04) was significant and Baron and Kenny (1986) called this phenomenon as full mediation. In conclusion, the mediating role of internalized shame was confirmed, hence supporting hypothesis number 3.

Discussion

Empirical findings have shown that high comorbidity exists in PTSD symptoms, social anxiety, and internalized shame. Thus, an attempt was made to find out whether the presence of one psychological problem could cause another psychological problem or

not. Results of the study supported the existing literature (Aslam & Kamal, 2016; Nawaz et al., 2018; Velotti et al., 2017). Findings indicate positive relationships among the three variables of the study. Even though exposure to traumatic events often causes psychological problems, but there could be exceptions as well. Therefore, it was necessary to attempt to understand the mechanism through which one can develop psychological problems after experiencing traumatic events so that the indications can be handled via effective interventions.

With reference to the first hypothesis which postulated that PTSD symptoms are significantly related to social anxiety in a positive direction among retired army officers. That is, individuals with symptoms of PTSD will show greater levels of social anxiety. Findings of the present research were consistent with the results of the previous studies (Armenian et al., 2000; Aslam & Kamal, 2016; Brewin et al., 2000). Altogether these studies also found a positive association between PTSD symptoms and social anxiety. Consistent with the first hypothesis, the present research also confirmed a significant and positive association between social anxiety and internalized shame among retired army officers. Accordingly, upsurge in one psychological issue will cause consequent into co-morbidity with other psychological issues. These conclusions were well reinforced by preceding researches (Blum, 2008; Gilbert, 2007; Gilbert & Procter, 2006; Hoge, Auchterlonie, & Milliken, 2006; Orsillo et al., 1996). This reflects that those retired army officers who showed high internalized shame tend to experience more considerable social anxiety than their counterparts.

Finally, consistent with the first hypothesis, PTSD symptoms and internalized shame were related to each other in positive direction among retired army officers. The results of the study confirmed a positive and significant association amid PTSD symptoms and internalized shame. This indicates that with an upsurge in PTSD symptoms, there will be intensification in the experience of internalized shame. Existing empirical evidence supports the findings of the present study (e.g., Beck et al., 2015; Dewey et al., 2014; Hathaway, Boals, & Banks, 2010; Van Minnen, Harned, Zoellner, & Mills, 2012).

The second hypothesis stated that PTSD symptoms would significantly predict social anxiety in a positive direction. The results of the present study also confirmed that PTSD symptoms predicted social anxiety in a positive direction among retired army officers. Thus, indicating that a higher prevalence of symptoms of PTSD would lead to a higher prevalence of social anxiety. These results are

consistent with previous literature (Aslam & Kamal, 2016; Collimore et al., 2010; Orsillo et al., 1996; Waqas et al., 2018). This hypothesis also stated that internalized shame predicts social anxiety positively. The findings of the research supported this hypothesis by showing internalized shame as a positive and significant predictor of social anxiety. One reason of this finding is that possessing an understanding of truncated self-image because of an acquaintance to an upsetting happening could lead to evade these types of demanding circumstances in future and nonexistence of bravery to face others (Waqas et al., 2018). Thus, retired army officers who displayed an emotional state of shame also were less daring to happenstance social circumstances, which can be stressful and face criticism from people. Another part of second hypothesis was demonstrated as PTSD symptoms positively predict internalized shame among retired army officers. The findings of the study indicated that PTSD symptoms positively and significantly predicted internalized shame. This depicted that a higher prevalence of PTSD symptoms would lead to a higher prevalence of internalized shame among retired army officers. Experiential indication inclined to sustain the conclusions (Beck et al., 2015; Brewin et al., 2000; Hathaway et al., 2010; Dewey et al., 2014).

The third hypothesis of the study stated that internalized shame would mediate the connection amid PTSD symptoms and social anxiety amongst military veterans. The findings of the present study showed full mediation caused by internalized shame among the association amongst PTSD symptoms and social anxiety. Thus, confirming that internalized shame explained or caused a large part of the association amid PTSD symptoms and social anxiety in retired army officers. PTSD symptoms tend to cause an indirect effect on social anxiety through internalized shame. This suggests that retired army officers experiencing PTSD symptoms develop high internalized shame, which eventually leads to higher social anxiety. Empirical evidence showed that internalized shame is related to aloneness, social evasion, and blaming oneself (Lutwak, Panish, & Ferrari, 2003; Nathanson, 1992; Rostami & Jowkar, 2016) indicating that how these associations can affect an individual's interaction with people. This finding was in accordance to previous literature showing positive association between PTSD symptoms, internalized shame, and social anxiety (Aakvaag et al., 2016; Arditte et al., 2016; Beck et al., 2015; Blum, 2008; Gilbert, 2007; La Bash & Papa 2014; Van Minnen et al., 2012; Wilson et al., 2006). Moreover, shame is added as a symptom of PTSD in DSM-5 and social anxiety is highly associated with the criteria of avoidance of PTSD (Aakvaag et al., 2016).

Limitations and Suggestions

Following were the confines of the current research, that is, participants of the research were mostly engaged from Islamabad and Rawalpindi. Therefore, the sample of the study did not embody the retired army officers from all over Pakistan, which may inadequately generalize the findings. The existing research was led by only army officers who were retired rather than implementing it on both serving and retired officers and as serving officers who might also experience PTSD symptoms, which may lead to different psychological problems. The possibility of biasness was increased with the use of self-reported measures. Excluding females from the study and taking only males as a sample again decreases the generalizability of findings. As it was a cross-sectional study, therefore it could not provide any information on the impact of various risk factors on individuals' mental health over time. Limited resources and time period also decreased the impact of the study. It is a quantitative study, thus limiting the in-depth exploration of the phenomena.

It was proposed that identical researches must be sought to be directed across diverse parts of Pakistan. Impending studies might encompass bigger sample sizes. Furthermore, countless other features concerning retired army officers would also be absorbed for forthcoming researches. Upcoming investigations must stress a blend of quantifiable and qualitative methods to scrutinize the impact of recognized risk aspects on the psychosomatic well-being of persons with exposure to adverse events. Present findings would help the respective authorities and the concerned departments to take measures to relieve their symptoms and promote wellbeing.

Implications

This research also aimed to recognize the mechanism through which psychological problem occurs. Therefore, in such circumstances where experiencing an adverse event can't be evaded. This research provides a mechanism through which a psychological issue is may be caused and identifies whether a problem is being caused by an adverse event or due to the presence of another problem. As in this study, it was determined that the cause of social anxiety was internalized shame instead of traumas.

Findings of comprehensive research would be useful for armed forces to identify and minimize the acquaintance to adverse events that might consequence into an expansion of psychosomatic problems, for instance, internalized shame. The findings in the long term will be

useful to initiate an appropriate plan of treatment for the negative outcomes of drastic events. Conclusions of the research are also useful to find out that minimizing internalized shame would decrease PTSD symptoms and social anxiety.

Conclusion

The results of the study revealed that PTSD symptoms lead to the development of social anxiety and internalized shame among retired army officers. Moreover, the presence of internalized shame also results in social anxiety. Noteworthy contribution of the study was that internalized shame tends to mediate the relationship between PTSD symptoms and social anxiety fully. This study is immensely crucial for authorities and psychologists to understand the mechanism of the development of the psychological problem and that elimination of one psychological issue could lead to the minimization of another issue as one reason for their cause could be the already prevailing psychological problem.

References

- Amstadter, A. B., & Vernon, L. L. (2008). Emotional reactions during and after trauma: A comparison of trauma types. *Journal of Aggression, Maltreatment & Trauma, 16*(4), 391-408.
- Aakvaag H. F., Thoresen S., Wentzel-Larsen T., Dyb, G., Røysamb E., & Olff M. (2016). Broken and guilty since it happened: A population study of trauma-related shame and guilt after violence and sexual abuse. *Journal of Affective Disorders, 204*(1), 16-13.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. Arlington, VA, USA: Author.
- Andrews, B., Qian, M., & Valentine, J. D. (2002). Predicting depressive symptoms with a new measure of shame: Experience of Shame Scale. *British Journal of Clinical Psychology, 41*(1), 29-42.
- Andrews B., Brewin C. R., Rose S., Kirk, M., & Strauss M. E. (2000). Predicting PTSD symptoms in victims of violent crime: The role of shame, anger, and childhood abuse. *Journal of Abnormal Psychology, 109*(1), 69-73.
- Arditte, K. A., Morabito, D. M., Shaw, A. M., & Timpano, K. R. (2016). Interpersonal risk for suicide in social anxiety: The roles of shame and depression. *Psychiatry Research, 239*(1), 139-144.
- Armenian, H. K., Morikawa, M., Melkonian, A. K., Hovanesian, A. P., Haroutunian, N., Saigh, P. A., ... & Akiskal, H. S. (2000). Loss as a

- determinant of PTSD in a cohort of adult survivors of the 1988 earthquake in Armenia: Implications for policy. *Acta Psychiatrica Scandinavica*, *102*(1), 58-64.
- Aslam, N., & Kamal, A. (2016). Stress, anxiety, depression, and posttraumatic stress disorder among general population affected by floods in Pakistan. *Pakistan Journal of Medical Research*, *55*(1), 29-32.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical consideration. *Journal of Personality and Social Psychology*, *51*, 1173-1182.
- Beck, J. G., McNiff, J., Clapp, J. D., Olsen S. A., Avery, M. L., & Hagewood, J. H. (2011). Exploring negative emotion in women experiencing intimate partner violence: Shame, guilt, and PTSD. *Behavior Therapy*, *42*(4), 740-750.
- Beck, J. G., Reich, C. M., Woodward, M. J., Olsen, S. A., Jones, J. M., & Patton, S. C. (2015). How do negative emotions relate to dysfunctional post-trauma cognitions? An examination of interpersonal trauma survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*, *7*(1), 3-10.
- Bibi, A., Kalim, S., & Khalid, M. A. (2018). Post-traumatic stress disorder and resilience among adult burn patients in Pakistan: A cross-sectional study. *Burns & Trauma*, *6*(1), 78-92.
- Blum, A. (2008). Shame and guilt, misconceptions and controversies: A critical review of the literature. *Traumatology*, *14*(3), 91-102.
- Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology*, *68*(5), 910-924.
- Budden, A. (2009). The role of shame in posttraumatic stress disorder: A proposal for a socio-emotional model for DSM-V. *Social Science & Medicine*, *69*(7), 1032-1039.
- Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. *Social Phobia: Diagnosis, Assessment, and Treatment*, *41*(68), 22-38.
- Cook, D. R., & Coccimiglio, J. (2001). *Internalized Shame Scale: Technical Manual*. New York: Multi-Health Systems.
- Collimore, K. C., Carleton, R. N., Hofmann, S. G., & Asmundson, G. J. (2010). Posttraumatic stress and social anxiety: The interaction of traumatic events and interpersonal fears. *Depression and Anxiety*, *27*(11), 1017-1026.
- Dewey, D., Schuldberg, D., & Madathil, R. (2014). Do peri-traumatic emotions differentially predict PTSD symptom clusters? Initial evidence for emotion specificity. *Psychological Reports*, *115*(1), 1-12.
- Dodson, T. S., & Beck, J. G. (2017). Posttraumatic stress disorder symptoms and attitudes about social support: Does shame matter? *Journal of Anxiety Disorders*, *47*, 106-113.

- Drescher, K. D., Foy, D. W., Kelly, C., Leshner, A., Schutz, K., & Litz, B. (2011). An exploration of the viability and usefulness of the construct of moral injury in war veterans. *Traumatology, 17*(1), 8-13.
- Frueh, B. C., Turner, S. M., Beidel, D. C., & Cahill, S. P. (2001). Assessment of social functioning in combat veterans with PTSD. *Aggression and Violent Behavior, 6*(1), 79-90.
- Furmark, T. (2002). Social phobia: Overview of community surveys. *Acta Psychiatrica Scandinavica, 105*(2), 84-93.
- Gilbert, P. (2007). The evolution of shame as a marker for relationship security: A bio-psychosocial approach. In R. Tracy, R. Robins, & J. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 283-310). New York, Guilford.
- Gilbert, P., & Trower, P. (2001). Evolution and process in social anxiety. In W. R. Crozier & L. E. Alden (Eds.), *International handbook of social anxiety: Concepts, research and interventions relating to the self and shyness* (pp. 259-279). New York: John Wiley & Sons.
- Gilbert, P., Pehl, J., & Allan, S. (1994). The phenomenology of shame and guilt: An empirical investigation. *British Journal of Medical Psychology, 67*(1), 23-36.
- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice, 13*(6), 353-379.
- Hathaway, L. M., Boals, A., & Banks, J. B. (2010). PTSD symptoms and dominant emotional response to a traumatic event: An examination of DSM-IV Criterion A2. *Anxiety, Stress, and Coping, 23*(1), 119-126.
- Hershkowitz I., Lanes O., & Lamb M. E. (2007). Exploring the disclosure of child sexual abuse with alleged victims and their parents. *Child Abuse and Neglect, 31*(1), 111-123.
- Hoge, C. W., Lesikar, S. E., Guevara, R., Lange, J., Brundage, J. F., Engel Jr, C. C., ... & Orman, D. T. (2002). Mental disorders among US military personnel in the 1990s: Association with high levels of health care utilization and early military attrition. *American Journal of Psychiatry, 159*(9), 1576-1583.
- Hoge, C. W., Auchterlonie, J. L., & Milliken, C. S. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Jama, 295*(9), 1023-1032. doi:10.1001/jama.295.9.1023
- Jakupcak, M., Conybeare, D., Phelps, L., Hunt, S., Holmes, H. A., Felker, B., ... & McFall, M. E. (2007). Anger, hostility, and aggression among Iraq and Afghanistan war veterans reporting PTSD and subthreshold PTSD. *Journal of Traumatic Stress, 20*(6), 945-954.
- Kaiser, A. P., Wachen, J. S., Potter, C., Moye, J., & Davison, E. (2017). *Posttraumatic stress symptoms among older adults: A*

- review. Washington, DC: US Department of Veterans Affairs, National Center for PTSD.
- Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin, 137*(1), 68-76.
- Kulka, R. A., Schlenger, W. E., Fairbank, J. A., Hough, R. L., Jordan, B. K., Marmar, C. R., & Weiss, D. S. (1990). *Trauma and the Vietnam war generation: Report of findings from the National Vietnam Veterans Readjustment Study*. Copenhagen: Brunner/Mazel.
- La Bash H., & Papa A. (2014). Shame and PTSD symptoms. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*(1), 159-166.
- Lee, D. A., Scragg, P., & Turner, S. (2001). The role of shame and guilt in traumatic events: A clinical model of shame-based and guilt-based PTSD. *British Journal of Medical Psychology, 74*(4), 451-466.
- Lutwak N., Panish J., & Ferrari J. (2003). Shame and guilt: Characterological vs. behavioral self-blame and their relationship to fear of intimacy. *Personality and Individual Differences, 35*(4), 909-916.
- Mason, J. W., Wang, S., Yehuda, R., Riney, S., Charney, D. S., & Southwick, S. M. (2001). Psychogenic lowering of urinary cortisol levels linked to increased emotional numbing and a shame-depressive syndrome in combat-related posttraumatic stress disorder. *Psycho Somatic Medicine, 63*(3), 387-401.
- Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour Research and Therapy, 36*(4), 455-470.
- McCormack, L., & Joseph, S. (2013). Psychological growth in humanitarian aid personnel: Reintegrating with family and community following exposure to war and genocide. *Community, Work, and Family, 16*(2), 147-163.
- Nathanson D. L. (1992). *Shame and pride: Affect, sex, and the birth of the self*. New York: Norton.
- Nawaz, N., Khalily, M. T., & Gul, S. (2018). Outcomes of trauma exposure among adolescents of Pakistan: Role of PTSD and social support. *Pakistan Armed Forces Medical Journal, 68*(6), 1737-1743.
- Orsillo, S. M., Weathers, F. W., Litz, B. T., Steinberg, H. R., Huska, J. A., & Keane, T. M. (1996). Current and lifetime psychiatric disorders among veterans with war zone-related posttraumatic stress disorder. *Journal of Nervous and Mental Disease, 8*(2), 340-355.
- Ranganathan, A. R., & Todorov, N. (2010). Personality and self-forgiveness: The roles of shame, guilt, empathy and conciliatory behavior. *Journal of Social and Clinical Psychology, 29*(1), 1-22.
- Rostami, S., & Jowkar, B. (2016). The relationship between guilt and shame feelings with the dimensions of loneliness: The moderating effect of gender. *International Journal of Behavioral Sciences, 10* (1), 72-76.

- Stein, N. R., Mills, M. A., Arditte, K., Mendoza, C., Borah, A. M., Resick, P. A., ... & Strong, S. C. (2012). A scheme for categorizing traumatic military events. *Behavior Modification, 36*(6), 787-807.
- Ullman S. E. (1999). Social support and recovery from sexual assault: A review. *Aggression and Violent Behavior, 4*(3), 343-358.
- Van Minnen, A., Harned, M. S., Zoellner, L., & Mills, K. (2012). Examining potential contraindications for prolonged exposure therapy for PTSD. *European Journal of Psycho-traumatology, 3*(1), 188-195.
- Velotti, P., Garofalo, C., Bottazzi, F., & Caretti, V. (2017). Faces of shame: Implications for self-esteem, emotion regulation, aggression, and well-being. *The Journal of Psychology, 151*(2), 171-184.
- Waqas, A., Raza, N., Zahid, T., Rehman, A., Hamid, T., Hanif, A., ... & Chaudhry, M. A. (2018). Predictors of post-traumatic stress disorder among burn patients in Pakistan: The role of reconstructive surgery in post-burn psychosocial adjustment. *Burns, 44*(3), 620-625.
- Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). *The PTSD checklist for DSM-5 (PCL-5)*. Scale available from the National Center for PTSD at www.ptsd.va.gov.
- Wilson J. P., Droždek B., & Turkovic S. (2006). Posttraumatic shame and guilt. *Trauma, Violence, and Abuse, 7*(1), 122-141.
- Wong, M. R., & Cook, D. (1992). Shame and its contribution to PTSD. *Journal of Traumatic Stress, 5*(4), 557-562.
- Yehuda, R., Hoge, C. W., McFarlane, A. C., Vermetten, E., Lanius, R. A., Nievergelt, C. M., ... & Hyman, S. E. (2015). Post-traumatic stress disorder. *Nature Reviews Disease Primers, 1*(1), 150-157.
- Yehuda, R. (2002). Post-traumatic stress disorder. *New England Journal of Medicine, 346*(2), 108-114.
- Zafar, W., Khan, U. R., Siddiqui, S. A., Jamali, S., & Razzak, J. A. (2016). Workplace violence and self-reported psychological health: Coping with post-traumatic stress, mental distress, and burnout among physicians working in the emergency departments compared to other specialties in Pakistan. *The Journal of Emergency Medicine, 50*(1), 167-177.

Received 9th January, 2019

Revision received 10th February, 2020