STRESS APPRAISAL AND RELATED NEGATIVE EMOTIONAL EXPERIENCES OF FEMALES LIVING IN PRISON

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ABSTRACT

Objectives: *the study amid at exploring the relationship between stress appraisal and related negative emotional experiences of females living in prison. Further research also determine how stress appraisal and anger predicts shame and guilt in females and to explore difference between stress appraisal and related negative emotions experienced by females living in prison.*

Design: *Current study employed correlational research design.*

Place and Duration of the study: *Central Jail Kot Lakhpat, Lahore Pakistan. Data was collected from June to July in the year 2017.*

Subjects and Method: *The sample incorporated of 135 "females aged between 20-55 years" (M=35.75, SD. =9.54) detainees was drawn from Central Jail Kot Lakhpat, Lahore Pakistan through purposive sampling technique. Stress Appraisal Measure-SAM, Anger Expression Scale-AES, and State Shame & Guilt Scale (SSGS) were administered for data collection.*

Results and Conclusion: *Results showed significant association between stress appraisal, anger, shame, and guilt in female living in prison. Findings demonstrated that stress appraisal, externalizing, and internalizing anger were also significant predictors of shame and guilt in females. In addition, anger control was negative predictors of shame and guilt in females living in prison. Independent sample t-test explored that under trial females had less stress appraisal than convicted females. Moreover, results depicted that convicted females had more internalized anger than under trial females. Female inmates with family crime history had greater anger inward and anger control. Implication and suggestions for future research have been given.*

Keywords *Stress Appraisal; Anger; Shame; Guilt; Female Prisoners*

INTRODUCTION

Females occupy concerning half of Pakistan's population and that they live below such circumstances that may perhaps protect them from the identification and prosecution of the crime. According to jail statistics, as of March 2016, there have been 916 females in prisons of Punjab. Presently 575 (62.7%) were under trial, a total of 295 (32.2%) were convicted, and 46 (5%) have been awarded a death sentence. The current condition suggests that female criminality demands more consideration and research curiosity than it has received (Warraich & Farooq, 2015).

The incident of imprisonment is likely to be followed by feelings of intense and enduring stress. Women during imprisonment feel several other emotions e.g. anger, shame, and guilt after committing a crime (Busko & Kulenovic, 2000). Researchers Weissman, DeLamater, and Lovejoy, (2003) suggested that imprisoned females have greater levels of mental health issues and depression as compared to male inmates. In literature, there are numerous approaches defining stress, and describing its nature (Durak, 2007).

Stress appraisal was described as an actual prediction of stress. Lazarus (1991) categorized stress appraisal into three different categories such as primary appraisal which means to review the possible harm consequential from a distressing encounter. Subsequent primary appraisal, the next progression is secondary appraisal, in which an individual takes to mind a prospective way to react to a threat. The third process is that of reappraisal or executing the response to the threat. Additionally, reappraisal includes both primary and secondary appraisals, they generally work together and modified to reconcile on the sense of an event. Frequent emotions such as anger, sadness, guilt, and anxiety are essentially transpired as a result of cognitive appraisals and particularly fall under the category of primary appraisal (Du, Huang, An, & Xu, 2018). Anger has been out looked as both a prime cause of female imprisonment (McDonagh, 1999), and as an upshot of their incarceration (Pennix, 1999).

Anger generally serves as a response of distress; many researchers investigated the experience of anger and its related appraisals (Lerner & Tiedens, 2006). The reaction of a person can be compared to a different set of appraisals such as feelings of guilt and shame rather than anger; individuals might have about a negative event (Neumann, 2000). Although such stress appraisal patterns were traditionally conceptualized as causes of the experience of anger (Berkowitz & Harmon-Jones, 2004).

Some of the previous research findings indicated that stress might be an illustration of anger (Bongard & al'Absi, 2003) others indicated that anger might be an illustration of stress and typical patterns of cognitive appraisal (Hazebroek, Howells, & Day, 2001). Anger is highly stressed inducing. It is also observed that anger has a robust association between shame and guilt (Tavris, 1989). Number of studies showed positive association between shame and anger (Hejdenberg & Andrews, 2011). Shame is in general the additional throbbing, upsetting emotion (Tangney, Stuewig & Hafez, 2011). Guilt, on the other hand, showed to be less upsetting and more adaptive. When feeling guilt, people are disposed to think over the transgression, desiring they had acted differently (Tangney et al., 2011). Researchers Hosser, Windzio, and Greve (2007) studied jail inmates and identified that anger, expression of anger, loss of self-worth, and social withdrawal are related to shame. Results also revealed that guilt at the time of imprisonment lowers the rates of recidivism, while shame consistent with a higher rate of repeated illegal behaviors.

Owing to the fact that comparatively little empirical research exits which investigate the stress appraisal and related negative emotional experiences of females living in prison. The current research was an exploratory attempt. The objectives of the current research were 1) To investigate association between stress appraisal and related negative emotional experiences such as anger, shame and guilt, females in prison must typically face. 2) To determine how stress appraisal and anger predicts shame and guilt of females in prison. 3) To determine differences in stress appraisal and related negative emotional experiences in females concerning their demographic variables (i.e. nature of imprisonment and family crime history) were also explored.

METHOD

Participants

Data were obtained from 135 female living in prison within the age range 20-55 years (M=35.75; SD =9.54), selected through purposive sampling, taken from Central Jail Kot Lakhpat Lahore Pakistan. Only females who had committed offenses particularly murder, drug trafficking, kidnapping (boys and girls) and burglary were included in the study. Participants' demographic characteristics are presented in Table 1.

Measures

Demographic Sheet

Demographic data sheet contained age, education, marital status, number of children, number of siblings, and family system. Several questions were designed regarding current status in prisons, duration of incarceration, several visits in prison, nature of the felony, nature of past crimes, and family crime history.

Stress Appraisal Measure   (Peacock & Wong, 1990)

They established the Original version of the scale. The Urdu version of SAM translated by Kausar and Anwar (2010) was used in current research. Likert scale ranging "not at all" to "extremely agree" was used for responses. The reliability of the scales is at (.78). An elevated score on SAM pointed out that the person was experiencing more stress.

Anger Expression Scale (AES) (Shafqat & Ijaz , 2016)

Anger Expression Scale was developed by Shafqat and Ijaz. The scale comprised of 23 items in total and developed in the Urdu Language. The scale contains three subscales named anger inward, anger outward, and anger control. Scoring was taken on a Likert scale range from "not at all" to "extremely agree". The three subscales have consisted of different items such as anger inward included items (1,2,3,4,5,6,7), the item number (8,9,10,11,12,21,22,23) come under the subscale of anger outward. Third subscale anger control have item number (13, 14, 15, 16, 17, 18, 19, 20).The reliability of the subscales of the anger expression scale was in the range of .53 to .77. The reliability of the total score of the anger expression scale was .69.

***State Shame and Guilt Scale*-SSGS (Marshal, Sanftner, & Tangney ,1994).**

Urdu version translated by Rasool and Kauser (2012) was used in the present study, originally developed by Marshal etal. The SSGS comprised of 15 items in total. The scale has three subscales namely shame, guilt, and pride. In the existing study only two subscales shame items e.g. 2, 5,8,11 and guilt items e.g. 3, 6,9,12 and 15 were used. Responses were taken on a Likert scale ranges

from 1-5. The values of Cronbach's α for the two sub-scales were consistent: for shame items (α = .89), guilt items (α = .82).

Procedure

Firstly, permission was taken from the authors of original and translated versions of the scales via e-mails. Once, the permission of using scales in the current study was approved by the author's permission from Inspector General (IG) of Punjab Prisons was taken for data collection. An IG prison was provided the permission letter which was prior signed by the head of the Department of Clinical Psychology Unit, GC University, Lahore Pakistan. IG prison was informed about the nature and purpose of the study. Data were collected only from Central Jail Kot Lakhpat. The jail staff was informed about the nature and purpose of the study after taking the permission of Senior Superintendent Central Jail Kot Lakhpat. Jail staff was also briefed about the criteria and consent of the subjects.

Participants were informed about their rights and the nature of the research earlier than the administration of the scales. After explaining the authorization form, consent of the participants was taken and they were assured about the confidentiality and privacy of the information. They were assured that information would be used only for research and educational purposes. The instructions were given and they were provided with the demographic sheet, Stress Appraisal Measure, Anger Expression Scale, and State Shame and Guilt Scale. The scales were given to the participants by individually approaching them. It took 15-20 minutes to fill the entire questionnaire. The questionnaires were collected from the participants after completion and they were thanked for their participation in the research.

Statistical Package for Social Sciences-SPSS was utilized for the investigation of the data. In three steps data analysis are presented. First descriptive statistics were obtained. Second, to determine relationship Pearson Product Moment Correlation was used to assess the relationship among stress appraisal, anger, shame and guilt of females living in prison. Regression analysis was also used to determine stress appraisal and anger as the predictor variables of shame and guilt. Independent sample t-test is presented which were used to find out how different factors such as nature of imprisonment and family crime history affect stress appraisal and other related negative emotional experiences (i.e. anger, shame and guilt) of females living in prison.

RESULTS

Table 1
Demographic characteristics of female living in prison (N=135).

Variables	*F*	%
Age (M=35.75, SD.=9.54)		
Education		
Illiterate	81	60%
School Education	37	27%
Intermediate	10	7%
Graduation	7	5%
Family System		
Joint	83	61%
Nuclear	52	38%
Residential Area		
Urban	84	62%
Rural	51	37%
Monthly Income		
<10000-10000	66	48%
11000-20000	47	34%
21000-30000	8	5%
31000-40000	11	10%
Marital Status		
Married	84	62%
Unmarried	15	11%
Divorced	9	6%
Separated	7	5%
Widow	20	14%

Note: M=Mean, SD=Standard Deviation, *f*=Frequency, %=Percentage

Table 2

Correlation analysis showing the relationship between Stress Appraisal, Anger, Shame and Guilt in females living in prison (N=135)

1. Variables	1	2	3	4	5	6
1.SA		.363**	.436**	.420**	.428**	.421**
2.IA			.263**	.469**	.157	.192*
3.EA				.547**	.371**	.459**
4.AC					.134	.252**
5.Shame						.758**
6. Guilt						

Note: SA= Stress Appraisal, Anger=Internalized Anger (IA), Externalized Anger (EA) and Anger Control (AC).
**p<0.01, *p<0.05

Table 2 depicted the significant (**p<0.01) relationship between stress appraisal, internalized anger, externalized anger, anger control, shame, and guilt. Further, it was explored that different dimensions of anger such as internalized anger were positively (**p<0.01,*p<0.05) related to externalized anger, anger control, and guilt. It was also observed that externalized anger was correlated with anger control, shame, and guilt in female prisoners. Results also suggested that shame was also found significantly correlated with guilt.

Table 3

Summary of Multiple Linear Regression Analysis for Stress Appraisal and Anger Predicting Shame in females living in prison (N=135).

Model 1	Shame				
	B	**SEB**	β	t	P
Constant	5.16	2.62		1.97	.051
SA	.090	.022	.364*	4.09	.000
IA	.021	.045	.040**	.457	.648
EA	.221	.066	.318*	3.37	.001
AC	-.133	.063	-.212*	-2.11	.036
F	10.946				
R^2	.252				
ΔR^2	.252				

Note: SA= Stress Appraisal, Anger= Internalized Anger (IA), Externalized Anger (EA) and Anger Control (AC), and *p<0.05, **p<0.01

Table 3 depicting the total variance explained by the model for shame was R^2 .252 and ΔR^2 =.252, F (4,130) =10.94, p<.001. 25% variance in shame was explained by the stress appraisal and different dimensions of anger. Results also investigated that stress appraisal (β = .380, p<0.05) was a significant predictor of shame in females. Dimensions of anger which were anger inward (β =.040, p<0.01), anger outward (β=.318, p<0.05), and anger control (β= -.212, p<0.05) were significantly predicting shame in females. It was observed in results that anger control was negatively predicting shame in females living in prison.

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Table 4
Summary of Multiple Linear Regression Analysis for Stress Appraisal and Anger Predicting Guilt in female living in prison (N=135).

	Guilt				
Model 1	**B**	**SEB**	**β**	**T**	**P**
Constant	7.88	2.35		3.34	.001
SA	.063	.020	.282*	3.22	.002
IA	.015	.040	.032**	.367	.714
EA	.238	.059	.375*	4.03	.000
AC	-.050	.056	-.087	-.880	.381
F	12.319				
R^2	.275				
ΔR^2	.275				

Note: Stress Appraisal=SA, Anger= Internalized Anger (IA), Externalized Anger (EA) and Anger Control (AC) ,and *p< 0.05, **p< 0.01

Table 4 showing the total variance depicted in results by the model for guilt was R^2 .275 and ΔR^2 =.275, F (4,130) =12.31, p<.001. 27% variance in guilt was explained by the stress appraisal and different dimensions of anger. Results also explored that stress appraisal (β = .282, p<0.05) was a significant predictor of guilt in female. Further, results revealed that dimensions of anger e.g. internalized anger (β=.032, p<0.01), externalized anger (β=.375, p<0.05), and anger control (β =-.087, p<0.05) were significantly predicting guilt in female offenders. Additionally, it was suggested in results that anger control was a negative predictor of guilt in female living in prison.

Table 5

Comparing females on their Stress Appraisal, Internalized Anger, and Externalized Anger concerning their Nature of Current Imprisonment (N=135).

	Nature of Current Imprisonment					
Variables	*(UT=94)*	*(CON=41)*	*t (133)*	*p*	*95% CI*	*Cohen's d*
	M (SD)	*M (SD)*			*LL UL*	
SA	134.28 (16.17)	139.39 (20.67)	-1.54 *	.042	11.64 1.41	0.27
IA	10.81 (8.15)	12.12 (9.42)	-.820	.022*	-4.48 1.85	0.14
EA	20.04 (6.0)	19.54 (6.90)	.430	.159	-1.82 2.83	0.07

*P<.05*Note: M=Mean, SD=standard deviation, CI=Confidence Interval, LL=Lower Limit, UL=Up Limit and p< 0.05, and UT=Under Trial, CON= Convicted, SA=Stress Appraisal, Anger= Internalized Anger (IA) and Externalized Anger (EA)

Table 5 indicating results for the Independent Sample t-test. The findings of t-test explored that under trial females had less stress appraisal than convicted females. Moreover, it was also investigated that convicted female prisoners have more internalized anger in comparison of under trial female. However, externalized anger was also explored and results suggested that females either under trial or convicted had similar expression of anger outward.

Table 6

Comparing females on their Stress Appraisal and Anger concerning their Family Crime History (N=135).

	Family crime history of female prisoners							
Variables	*Yes (N=53)*		*No(N=82)*				*95% CI*	*Cohen's d*
	M *SD*		*M* *SD*		*t(133)*	*p*	*LL UL*	
SAM	139.4 (20.1)		133.6 (15.6) 9.1 (8.2)		1.67	.097	1.01 11.07	0.32
IA	14.3 (8.1) 21.1		19.7 (5.5) 13.1		3.5	.000*	2.30 7.99	0.63
EA	(7.0) 16.6	(6.7)	(6.8)		1.7	.078	.23 4.30	0.31
AC					2.9	.004*	1.11 5.81	0.51

Note: M=Mean, S.D=standard deviation, CI=Confidence Interval, LL=Lower Limit, UL=Up Limit and p< 0.05, p< 0.001 and Anger=Internalized Anger (IA), Externalized Anger (EA) and Anger Control

DISCUSSION

The findings of the present research established some interesting trends. The findings of the study explored that stress appraisal; anger, shame, and guilt were significantly correlated. It was hypothesized that there is likely to be a relationship between stress appraisal, anger, shame, and guilt in females living in prison. Findings of the study explored strong association between stress appraisal, anger, shame, and guilt in female inmates. Previous researches were found congruent with the findings of the current study. Two distinct experimental studies were carried out by Hemenover and Zhang (2004) and findings of the study suggested that anger in comparison of mental state-directed to more positive appraisals of stress-causing agents. It was also revealed that anger was also evoked by the impacts which were restricted to appraisal dimensions. These findings were partially replicated by study two that was conducted on 116 community individuals. Additional findings of the research suggested that personality of an individual influences the outcomes. An emotionally stable and sociable person has the most optimistic appraisals.

A study by Hejdenberg and Andrew (2011) investigated that shame confrontation was allied with trait anger, and this association was accounted for

by the role of angry responses to disapprovals. Particularly, behavioral shame was linked with a propensity toward angry responses and trait anger, while character logical and bodily decency was only associated with angry reactions to denunciation.

Further, findings of the current study suggested that stress appraisal and anger was a robust predictor of shame and guilt. Except for anger control, all were the significant predictor of shame and guilt. Velotti, Garofalo, Bottazi and Caretti (2016) studied 380 males and females. Results suggested higher levels of shame, guilt, stress reappraisal, psychological distress and aggressive behavior in females. Further, shame was associated with elevated levels of aggression and psychological distress in females. Lutwak, Panish, Ferrari, and Razzino (2001) suggested that the greatest positive predictor of shame tendency was internalized anger. Gender variability was noticed that guilt vulnerability was strongly predicted by increased internalized anger, lesser anger control, and decreased expectation of future success in female students.

The researcher also proposed that under trial female prisoners will have more stress appraisal, externalized, and internalized anger as compare to convicted females. Further, findings of the t-test in present research suggested that under trial females experienced less stress appraisal and anger inward. Further investigation of results indicated that under trial female inmates had more externalised anger in comparison of convicted females. Results of t-test analysis were supported by the findings of previous research study. The findings showed that newly arrived prisoners, who are likely to serve long term penalty they suffer more from stress in comparison to those prisoners who are residing from a lengthy period in jail (MacKenzie & Goldstein, 1985). The present study also compared females on stress appraisal and anger with regards to their family history of doing crime. Results were significant for stress appraisal and anger inward in females. Anger control was significantly contrary only concerning family crime history.

Conclusion

In conclusion, the current study investigated a significant correlation between stress appraisal, anger, shame, and guilt of females living in prison. The present research also recommended that stress appraisal and anger was a strong predictor of shame and guilt in females living in prison. Moreover, the finding

suggests that anger, shame, and stress appraisal were a strong predictor of shame and guilt.

Limitations and Recommendations

Despite of significant results of the current research, few limitations are in worth consideration. These interpretations are highly tentative, with this research being limited in several areas. The findings of present research need to be interpreted with carefulness because of the small sample size. Nevertheless, it opens the door for future researchers and maybe by replicating the study in other prisons of different cities, using a large sample size including males too, would also allow comparison of violent and nonviolent aberrant not possible in the present study. In addition, findings of the study are important for those involved in management of female prisoners to note that female have high level of stress appraisal and related negative emotions. Women in prison different in both their experience and expression of these emotions and are in need of treatment specifically tailored according to their individual needs.

REFERENCES

Berkowitz, L., & Harmon-Jones, E. (2004). Toward an Understanding of the Determinants of Anger. *Emotion*, *4*(2), 107–130.https: //doi.org/ 10.1037/ 1528-3542.4.2.107

Bongard, S., & Al'Absi, M. (2003). Domain-specific anger expression assessment and blood pressure during rest and acute stress. *Personality and Individual Differences*, *34*(8), 1383–1402. https://doi.org/10.1016/s0191-8869 (02)00106-x

Busko, V., & Kulenovic, A. (2000). Depressive reactions as an outcome of stress processes: The study on imprisonment. *Drustvena Istrazivanja: Journal for General Social Issues*, *10*(1–2), 231–252. Retrieved from https://www.researchgate.net/publication/285734566_Depressive_reactio ns_as_an_outcome_of_stress_processes_The_study_on_imprisonment

Du, J., Huang, J., An, Y., & Xu, W. (2018). The Relationship between stress and negative emotion: The Mediating role of rumination. *Clinical Research and Trials*, *4*(1), 1–5. https://doi.org/10.15761/crt.1000208

Durak, M. (2007). The relationship between sognitive appraisals of stress, coping strategies, and psychological distress in correctional officers: Personal and environmental factors. *(Published doctoral thesis).* The Graduate School of Social Science of Middle East Technical University Turkey.

Hazebroek, J. F., Howells, K., & Day, A. (2001). Cognitive appraisals associated with high trait anger. *Personality and Individual Differences*, *30*(1), 31–45.https://doi.org/10.1016/s0191-8869(00)000076

Hejdenberg, J., & Andrews, B. (2011a). The relationship between shame and different types of anger: A theory-based investigation. *Personality and Individual Differences*, *50*(8), 1278–1282. https://doi.org/10.1016/j.paid.2011.02.024

Hejdenberg, J., & Andrews, B. (2011b). The relationship between shame and different types of anger: A theory-based investigation. *Personality and Individual Differences*, *50*(8), 1278–1282. https://doi.org/10.1016/j.paid.2011.02.024

Hemenover, S., & Zhang, S. (2004). Anger, personality, and optimistic stress appraisals. *Cognition & Emotion*, *18*(3), 363–382. https://doi.org/10.1080/02699930341000103

Hosser, D., Windzio, M., & Greve, W. (2007). Guilt and Shame as Predictors of Recidivism. *Criminal Justice and Behavior*, *35*(1), 138–152. https://doi.org/10.1177/0093854807309224

Kausar, R., & Anwar, T. (2010). Perceived stress, stress appraisal, and coping strategies used in relation to television coverage of terrorist incidents. *Pakistan Journal of Social and Clinical Psychology, 8*(2), 119-131.

Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, *46*(8), 819–834. https://doi.org/10.1037/0003-066x.46.8.819

Lerner, J. S., & Tiedens, L. Z. (2006). Portrait of the angry decision maker: how appraisal tendencies shape anger's influence on cognition. *Journal of*

Behavioral Decision Making, *19*(2), 115–137. https://doi.org/10.1002/bdm.515

Lutwak, N., Panish, J. B., Ferrari, J. R., & Razzino, B. E. (2001). Shame and guilt and their relationship to positive expectations and anger expressiveness. *Adolescence*, *36*(144), 641.

Mackenzie, D. L., & Goodstein, L. (1985). Long-Term Incarceration Impacts and Characteristics of Long-Term Offenders An Empirical Analysis. *Criminal Justice and Behavior, 2*(4), 395-414.

McDonough, D. (1999). *Federally sentenced women maximum security interview project: not letting the time do you.* Canada: Correctional Services of Canada

Marschal, D., Sanftner, J., & Tangney, J.P. (1994). *The State Shame and Guilt Scale.* George Mason University; Fairfax, VA.

Neumann, R. (2000). The Causal Influences of Attributions on Emotions: A Procedural Priming Approach. *Psychological Science*, *11*(3), 179–182. https://doi.org/10.1111/1467-9280.00238

Peacock, E. J., & Wong, P. T. P. (1990). The stress appraisal measure (SAM): A multidimensional approach to cognitive appraisal. *Stress Medicine*, *6*(3), 227–236. https://doi.org/10.1002/smi.2460060308

Pennix, P. R. (1999). An analysis of mothers in the federal prison system. *Corrections Compendium, 24*(12), 4–6.

Rasool, F., & Kausar, R. (2012). Psychosocial Causes of Beggary and its Psychological Implications. *Unpublished Master's Thesis.*University of Punjab, Lahore.

Shafqat, F. & Ijaz, T. (2016). Anger Expression Scale. *(Unpublished Master's Thesis)* Government College University (GCU) Lahore, Pakistan.

Tangney, J. P., Stuewig, J., & Hafez, L. (2011). Shame, guilt, and remorse: implications for offender populations. *Journal of Forensic Psychiatry & Psychology*, *22*(5), 706–723. https://doi.org/ 10.1080/14789949 .2011. 617541

Tavris, C. (1982). *Anger : The Misunderstood Emotion* (3rd Printing ed.). New York, US: Simon & Schuster.

Velotti, P., Garofalo, C., Bottazzi, F., & Caretti, V. (2016). Faces of Shame: Implications for Self-Esteem, Emotion Regulation, Aggression, and Well-Being. *The Journal of Psychology*, *151*(2), 171–184. https://   doi. Org/ 10. 108 0/ 00223980.2016.1248809

Warraich, I. A., & Farooq, M. (2015). Socio-Cultural Determinants of Female Criminality in Pakistan: A Study of Punjab. *Pakistan Journal of Social Sciences (PJSS)*, *35*(2), 875–890.

Weissman, M., DeLamater, L. D. L., & Lovejoy, A. (2003). Women's choices: Case management for women leaving jails and prisons. *The Source*, *12*(1), 9–12.