

## **Locus of Control and Death Anxiety among Police Personnel**

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The present study intended to identify the relationship between belief in personal control and death anxiety among police personnel. The sample constituted male police personnel ( $N = 285$ ) with age range of 18 to 58 years. Belief in Personal Control Scale (Batool, 2003) and Death Anxiety Scale (Kausar, 2002) were used to assess the nature of personal control and anxiety related to death, respectively. Results showed that death anxiety exhibited significant negative relationship with internal locus of control and significant positive association with external locus of control. Similarly, internal and external loci of control were negatively associated with each other. Regression analysis indicated external locus of control as a significant predictor of death anxiety. Police personnel scored high on externality revealed more death anxiety as compared to those identified as high on internality. Post hoc analysis revealed significant mean differences for the parameters of job stations, age, and job duration. Findings revealed that respondents posted at check posts, falling in senior age group, and extended job duration exhibited significantly elevated levels of death anxiety and external locus of control with lesser manifestation of internal locus. Hierarchical regression illustrated age, job duration, and job station as significant predictors of death anxiety. Future implications of the study were also discussed.

*Keywords:* External locus of control, internal locus of control, death anxiety, police personnel

Locus of control is conceptualized as an extent to which an individual perceives successes and failures in the life on being either internally or externally controlled (Steptoe & Wardle, 2001). Researchers had a view that the extent to which people perceive a

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belief that their lives to be under their own control is an important dimension of individual variation (Sacker, Bartley, Firth, & Fitzpatrick, 2001), a useful predictor of behavior in many situations (Bailis, Segall, Mahon, Chipperfield, & Dunn, 2001), and a mediating variable between the individual and one's life situation (Conner & Schimizu, 2002). Death Anxiety is a psychological phenomenon which is defined as an annihilation anxiety (Jones, 2001) referring it as a fear and dread of complete extinction, as well as worry about becoming nothing at all. Fear of death is a not a singleton variable rather it constitutes several components like loss of identity and loneliness or being in solitude (DePaola, Neimeyer, Griffin, & Young, 2003). Nyatanga and de Vocht (2006) conceptualize death anxiety as those events and experiences in day-to-day encounters of life rather than in acute situations, where there are immediate threats and dangers to life.

Earlier empirical evidence has shown that internal control beliefs have been linked with low levels of mortality, fewer activity limitations (Nelson, Moore, Olivetti, & Scott, 1997), and protective against the occurrence of morbidity (Skinner, 1996). On the other hand, low levels of internal control have predicted reduced exercise and greater levels of depression (Ben-Ari, Florian, & Mikulincer, 1999). It has been postulated that mortality salience leads us to seek ways to more closely embrace our worldview (Greenberg, Arndt, Schimel, Pyszczynski, & Solomon, 2001). Extensive literature further documented the evidence that internality is most often found to be more positive than externality. It has been observed that sense of personal control is negatively associated with high perceived stress, negative mood, and death anxiety (Conner & Shimizu, 2002).

It has been documented that prolonged exposure to insecure, unpredictable, and stressful environments, such as chronic civil war, over a period of time may raise the levels of death anxiety (Abdel-Khalek, 2004). It has also been suggested that conscious manifestations of death anxiety may fluctuate in the face of stressors among individuals based on the type, context, and duration of environmental trauma and death-related stressors (Naderi & Esmaili, 2009). Furthermore, impending or lingering fear of death is one of the most persistent consequences of traumatic experiences with death (Solomon, Greenberg, & Pyszczynski, 2000).

Empirical evidence inferred that death anxiety has been associated with heightened negative attitudes (DePaola et al., 2003; O'Driscoll & Beehr, 2000), disruption in personal relationships (Lehto & Stein, 2009), clinical disorders particularly eating disorders and self-mutilation disorders (Farber, Jackson, Tabin, & Bachar, 2007),

and anxiety disorders (Abdel-Khalek & Sabado, 2005). It is thought that generalized anxiety disorder and death anxiety share variance in that both hold negative emotions characterized by worry, distress, insecurity, tension and uneasiness, whether directed toward the threat of death or more general dangers (Sjoberg, 2005).

Psychological strain and distress due to the work environment is widely prevalent, exclusively in occupations characterized by working in critical and grave situations (Paton, 2006; Patterson, 2003). Police work is characterized by sudden events, major and minor crimes, actions, and injuries associated with traffic accidents (Sjoberg, 2005). It has been found that more stress is experienced by police officers who are inclined to think more frequently about the likelihood of being injured (O'Driscoll & Beehr, 2000). The job of police officers in patrolling is less predictable and psychologically demanding. Fear related to death is found to be positively correlated with burnout and less perceived internal control in police systems (Hart, Wearing, & Headey, 1995; Mageroy, Riise, Johenson, & Moen, 2008). It has also been observed that police officers with greater reporting of internal control are less likely to develop chronic Post Traumatic Stress Disorder, nevertheless repeated exposure to potentially traumatic events (Mahoney & Quick, 2000). Similarly, it has been observed that death anxiety is likely to be high in the death-risk occupations (such as police officers and fire fighters) than in death-exposure occupations (Neimeyer, 1998).

Violanti and Aron (1993, 1994) found that rangers and police personnel posted at the city entrance check posts and high alert zones exhibited greater fear of death, job stress, and absenteeism in comparison to those deputed on normal patrolling. Similarly constables displayed more preference for being assigned the task of regular surveillance than to be appointed on border check posts (Harpold & Feemster, 2002). It has been observed that policemen rendering their services in high security zones showed more concern for safety, elevated levels of death anxiety, and low job satisfaction as compared to the stable areas of the city (Suhail, 2001). Abdel-Khalek (2004) reported that senior police officers expressed more inclination for negative life events, powerful others beliefs, chance, God control, and psychological distress; while junior officers with lesser period of job reflected high internality and less psychological distress. Moreover it has been found that older policemen displayed more annihilation anxiety, less optimism, and depression as compared to the young ones (Tomer, 2000). Another study (Savery & Weaver, 1993) also reported that freshly inducted policemen exhibited greater

intrinsic motivation, less fear of being killed, and burnout in relation to the older policemen.

In Pakistan, elevation in the level of violence in the past few years has resulted in killings of policemen, which yielded unusually risky and life threatening situation to police officers. Owing to the continuous and repeated exposure to threatening and dangerous situations every day, policemen are at high risk of developing stress reactions. It has been concluded that if these symptoms persist more may lead to severe depression and even suicidal acts among police officers (Irshad, 2008). The present study is based on the police personnel of Islamabad Capital Territory (ICT) Police, Islamabad. ICT embodies seven police subdivisions and 15 police stations including women police station (Baloch, 2008). In the backdrop of existing scenario the present study aimed to determine the level of death anxiety experienced by police personnel particularly those rendering their services in the most vulnerable situations. It is also intended to examine their belief in personal control, especially in context of how stronger they have personal control while encountering life threatening events and experiencing death anxiety. Moreover, varying demographics like job stations, age, and job duration are also taken into account in relation to death anxiety and locus of control.

### **Hypotheses**

In accordance with the above mentioned objectives the following hypotheses were formulated:

1. Internal locus of control will be negatively correlated with external locus of control and death anxiety whereas death anxiety will exhibit positive association with external locus of control among police personnel.
2. Locus of control would significantly predict death anxiety among police personnel.
3. Police personnel posted at check posts will display elevated death anxiety and external locus of control as compared to personnel posted at other job stations among police personnel.
4. Young police personnel would experience less death anxiety and more internal locus as compared to their senior counterparts among police personnel.
5. Police personnel with extended job duration would display high external locus with greater level of death anxiety as

compared to those with less job duration among police personnel.

## Method

### Sample

A purposive sample of men police personnel ( $N = 285$ ) was taken from Traffic Police Offices of Islamabad and Rawalpindi; with age range of 18-58 years ( $M = 25.5$ ,  $SD = 4.14$ ). Education level of the participants fluctuated from under matriculation ( $n = 32$ ), matriculation ( $n = 101$ ), intermediate ( $n = 77$ ), graduation ( $n = 60$ ), to masters ( $n = 15$ ). Job designation of the police personnel included, constables ( $n = 131$ ), head constables ( $n = 62$ ), subinspectors ( $n = 26$ ), assistant subinspectors ( $n = 52$ ), and inspectors ( $n = 10$ ) while their job tenure fluctuated from 1-12 years ( $M = 6.58$ ,  $S.D = 1.65$ ). Additionally, the job stations were classified into different settings where the police personnel were officially posted e.g., police training school headquarters ( $n = 47$ ), traffic police offices ( $n = 69$ ), police stations ( $n = 69$ ), and check posts ( $n = 100$ ) i.e., National Assembly, Prime Minister Secretariat, Supreme Court of Pakistan, Judges Colony, SP Sadder Zone, Subdivisional Police Office Margalla Circle.

### Measures

**Belief in Personal Control Scale.** In the present study translated version of Belief in Personal Control Scale (Batool, 2003) originally developed by Berrenberg (1987) was used. It consisted of 65 items, further divided into two subscales i.e., External Locus of Control (34 items) with possible score range of 34-170 (cut off score is 85) and Internal Locus of Control (31 items) with score range of 31-155 (cut off score is 77.5). It's a 5-point rating scale anchored at each point with response categories ranging from *Always* (5) to *Never* (1). All the items were positively phrased; therefore, high scores on the respective subscales were indicative of more presence of that type of locus of control. Reliability coefficients reported for External Locus of Control and Internal Locus of Control were .88, and .83; respectively (Batool, 2003). In the present study reliability indices of .84 for Internal Locus of Control Subscale and .79 for External Locus of Control Subscale was achieved.

**Death Anxiety Scale.** Death Anxiety Scale (Kausar, 2002) was employed to assess death anxiety among police personnel. The scale included 20 items, and these items were categorized into the following six dimensions, i.e., concern over suffering and lingering death,

subjective proximity to death, disturbing death thoughts and impact on the survivors, fear of punishment, and fear of not being. Responses were obtained on a 5-point rating scale and response options ranged from *Always* (5) to *Never* (1) with possible score range of 20-100 and cut-off score of 50. All the items were positively phrased; therefore, high scores reflected high death anxiety. Reliability indices reported for Death Anxiety Scale was .89 (Kausar, 2002). Reliability coefficient of .81 was found for Death Anxiety Scale on the current sample.

### **Procedure**

Respondents were approached with prior permission of Inspector General of Islamabad. Data was gradually collected in different phases and questionnaires were filled from the officials, who gave their informed consent and willingness to participate in this study. The research questionnaires were distributed among personnel posted on check posts during their duty hours and were collected later depending on their feasibility. It was also ensured on the part of the researchers that all the information would be kept confidential and personal identity would not be revealed.

### **Results**

Intercorrelations showed that Death Anxiety Scale possessed significant negative relationship with Internal Locus of Control Subscale ( $r = -.42, p < .05$ ), and significant positive association with External Locus of Control Subscale ( $r = .61, p < .01$ ). However, Internal and External Locus of Control subscales exhibited significantly negative association with each other ( $r = -.67, p < .01$ ).

### **Regression Analysis**

Regression analysis was conducted to determine the impact of locus of control on death anxiety. Results indicated that external locus of control significantly predict ( $\beta = .402, R^2 = .173, \text{Adj } R^2 = .167, p < .01$ ) death anxiety and explained 40% of the variance in inducing anxiety related to death among police personnel. However, internal locus of control displayed non significant variance ( $\beta = .057, p < .29$ ) in predicting death anxiety.

Bivariate analysis indicated that high scorers on External Locus of Control subscale ( $n = 173$ ) exhibited more death anxiety as compared to those who scored high on Internal Locus of Control subscale ( $n = 112$ ) with  $t(283) = 5.28, p < .05$ .

**Multivariate Analysis**

One way ANOVA was carried out to determine significant mean differences across job stations, age and job duration. Additionally, hierarchical regression analysis was conducted to determine the predictors of death anxiety (see Table 1 and 2).

Table 1

*One way ANOVA for Job Stations, Age, and Job Duration on Variables of the Study (N = 285)*

Job Stations	Police Stations ( $n = 69$ )		Police Training Schools ( $n = 47$ )		Traffic Police Offices ( $n = 69$ )		Check Posts ( $n = 100$ )		F	Post Hoc
	M	SD	M	SD	M	SD	M	SD		
DAS	62.20	15.65	63.61	15.88	62.72	16.60	67.70	15.08	17.01***	4 > 1, 2, 3
ILC	89.13	7.23	83.80	6.43	84.71	7.52	81.04	6.72	9.97*	1 > 2, 3, 4
ELC	98.34	6.78	99.21	7.56	97.33	7.92	104.23	8.92	12.67**	4 > 1, 2, 3
Age	18-31 Years ( $n = 169$ )		31.1- 44 Years ( $n = 48$ )		44.1-58 Years ( $n = 68$ )		F	Post Hoc		
	M	SD	M	SD	M	SD				
DAS	70.2	9.87	73.6	8.63	76.25	8.45	11.50**	3 > 2, 1		
ILC	89.23	8.98	83.67	8.13	80.51	7.89	15.71**	1 > 2, 3		
ELC	83.75	8.92	89.42	7.29	93.56	6.54	13.30**	3 > 2, 1		
Job Duration	1-4 years ( $n = 107$ )		4.1-8 years ( $n = 98$ )		8.1-12 years ( $n = 80$ )		F	Post Hoc		
	M	SD	M	SD	M	SD				
DAS	67.34	8.21	71.48	7.89	73.21	6.73	11.90**	3 > 2, 1		
ILC	94.66	7.45	79.28	7.44	76.34	6.29	9.72**	1 > 2, 3		
ELC	87.48	6.43	90.39	7.85	91.62	7.41	10.77**	3 > 2, 1		

Note. DAS = Death Anxiety Scale; ILC = Internal Locus of Control; ELC = External Locus of Control

\* $p < .01$ , \*\* $p < .01$ ; \*\*\* $p < .001$ ; Between  $df = 3$ ; Within  $df = 281$ ;  $df = 284$

Table 1 indicated significant mean differences across varying demographics. On the parameters of job station, age, and job duration;

post hoc analysis revealed that respondents posted at check posts, falling in senior age group and extended job duration exhibited significantly higher levels of death anxiety and external locus of control with lesser manifestation of internal locus.

### Hierarchical Regression Analysis

Hierarchical regression analysis is performed to determine the impact of varying demographics, like, age, job duration, and job station in relation to death anxiety.

Table 2

*Hierarchical Regression Analysis for Predictors of Death Anxiety*

Variables	<i>B</i>	<i>SE</i>	$\beta$	$R^2$	$\Delta R^2$
Step 1					
Age	-.20	.04	.36***	.12	
Step 2					
Age	-.14	.04	.25***		
Job Duration	.13	.05	.20***	.25	.14***
Step 3					
Age	.13	.05	.22***		
Job Duration	.10	.05	.16*		
Job Station	-.05	.05	.24***	.30	.18**

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table 2 shows that in relation to death anxiety, age was significant in the first step ( $\beta = .36, p < .001$ ) and explained 12% of the variance. In step 2, an additional and significant 14% of variance ( $\beta = .20, p < .001$ ) was explained by the addition of job duration factor. In step 3, the addition of the job station explains an additional and significant 18% of the explained variance ( $\beta = .24, p < .001$ ).

### Discussion

The main purpose of the present study was to explore relationship between belief in personal control and death anxiety among police personnel. Results indicated significant inverse relationship of internal locus of control with death anxiety and external locus, whereas external locus of control was found to be significantly positively



correlated with death anxiety. Earlier evidence has shown that risk enduring behavior was negatively correlated with external locus of control (Horswill & McKenna, 1999). It was also found that internals displayed less fear of being injured than did externals in combat situations (Miller & Mulligan, 2002); similarly people identified high on externality expressed more nervousness and apprehensions about death related incidents (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004).

Regression analysis showed external locus of control as significant predictor of death anxiety. Various studies have concluded that burnout, emotional exhaustion (Tümekaya, 2001), depersonalization (Harpold & Feemster, 2002), and annihilation anxiety (Cooper, Okamura, & McNeil, 1999) have significant positive relationship with external locus of control; whereas personal accomplishment and optimism has shown negative relationship with external locus of control (Greenberg et al., 2001; Stipek, 1993). A meta-analysis of locus of control studies showed that subjective reports of an internal locus of control were associated with greater work satisfaction, job commitment, involvement (Conner & Schimizu, 2002), motivation, and performance (Spector, 1996). Moreover, internal locus of control was coupled with lower levels of emotional distress, superior physical health, and less occupational stress, and personal fluctuations in mood state (Forbes & Wainwright, 2001).

Findings of the study further revealed police personnel who were identified high on external locus of control tended to exhibit relatively high level of death anxiety as compared to those who were identified with internal locus of control. These results are quite consistent with the empirical evidences which indicated that perceived control has been a major component of personality hardiness (Carpenito-Moyet, 2008) which has been shown to moderate/buffer the relationship between stress and adverse health outcomes. Literature also concluded that hardy individuals do not shackle, lose hope and become ill while encountering or experiencing life stressors and threats as do non-hardy individuals (Bailis et al., 2001; Conner & Sparks, 1996). It has been found that depression, external locus of control and death anxiety is inter-related positively to a moderately high level (Demsey, 2004; Harpold & Feemster, 2006). Similarly, high levels of internal control beliefs have been linked with low levels of mortality and fewer activity limitations (Seeman & Lweis, 1995). Internals are found to be less susceptible to mortality experiences and possess enhanced tolerance of daily stressors (Steptoe & Wardle, 2001), whereas

externals expressed more reluctance and less sustenance in daring and challenging tasks (Salminen & Klen, 1994).

Multivariate analysis revealed significant difference in relation to job station indicating that police personnel posted on high risk check posts reflected relatively high level of death anxiety as compared to other police personnel working in police stations, police training schools, and offices. It has been previously found that death anxiety is likely to be high in the death-risk occupations in contrast to the level of death anxiety in death-exposure occupations (Patterson, 2003). Research suggested that workers in high-risk occupations such as police officers and fire fighters have higher death anxiety, as compared to those in high death-exposure occupations such as nursing and funeral director (Neimeyer, 1998). Findings of a study examining the relationship between experiencing and coping with life threatening events and self perceived health in a naval population operating specifically under non-combat and peaceful conditions led to the conclusion that those who were unable to put their life-threatening events behind reported reduced self-perceived health (Mageroy et al., 2008). Psychological strain, distress and fear of death due to work environment are widely prevalent, exclusively among police officials and security personnel working in critical grave situations (Dempsey, 2004). Moreover, constables working in high security zone (i.e. red zone area) responded differently as their nature of job is demanding and somewhat different from personnel working in low risk areas such as offices (Bibi, 2009).

Significant differences are also displayed on the parameter of age of respondents leading to the inference that senior age group expressed elevated levels of death anxiety and external locus. Previous evidence has also observed that fear of death amplifies with age and elderly are more sensitive to environmental and situational attributions of bereavement (Cicerelli, 2006). Results also indicated that extended job duration is associated with greater level of death anxiety and reduced perception of locus of control. It has been found that constant and prolonged exposure to threatening and combat situations enhances the vulnerability for annihilation anxiety and fear of death (Miller & Mulligan, 2002) with augmented job stress and job burnout (Patterson, 2002).

Hierarchical regression illustrated job station as significant predictor of death anxiety. Relevant literature led to the conclusion that situational and safety factors at the work place are associated with fear of serious injury, amputation and accidental death (Paton, 2006). Armed personnel posted at high war zone areas are more susceptible

to develop apprehension of casualty and grave injury as compared to those working in regular office settings (Sjoberg, 2005).

### **Limitations and Suggestions**

Few potential limitations are observed in the present study and their corresponding suggestions are proposed. Firstly, the findings of this study are based on quantitative methods only. The use of qualitative techniques, for instance interview and focus group discussions would enhance greater understanding of the phenomena. Secondly, the sample had been taken from twin cities only (i.e., Islamabad and Rawalpindi) thereby permitting less generalizability of results. It would be appropriate to incorporate police personnel from other cities of Pakistan in order to make it nationally representative. Thirdly, the sample curtailed only male police personnel, therefore for future studies adequate number of women police personnel should also be taken so as to encounter gender differences. Finally, other security personnel (e.g., intelligence agencies, rescue and bomb disposal squad) should also be incorporated as these populations also experience stressful encounters and are victims of terrorist attacks and violence incidents.

### **Implications**

The present study may present certain future implications. For instance, the findings may offer foundation for the clinical psychologists and social workers about the prevailing mental health problems of police personnel. Hence there is highlighted need for developing intervention based programs in order to enhance resilience, self efficacy, and coping among security personnel who are experiencing combat situations. The present study may also point the need of time to take some swift actions in strategic planning for the welfare of police personnel. Finally, it can provide the basis for future work regarding terrorism, death anxiety, and coping strategies adopted by the survivors of traumatic and terrorist attacks.

### **Conclusion**

The present study concluded that internal and external loci of control were differentially correlated with death anxiety; while

external locus of control was found to be significant predictor of death anxiety. Moreover, police personnel who were identified with external locus of control tended to show signs of high death anxiety, as compared to those who felt more sense of internal control. It was also observed that police personnel posted on check posts (i.e., high security zones), senior age group, and extended job duration exhibited augmented death anxiety in the recent disastrous wave of terrorism in Pakistan.

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