

# Posttraumatic Growth in Survivors of Law Enforcement Officers Killed in the Line of Duty



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Survey Conducted with the Membership of  
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Historically, psychological interventions for people who have experienced a traumatic event such as natural disaster, bereavement, acts of terrorism, or sexual/physical abuse have been focused on alleviating distress, suffering and remediation of any psychological problems brought on by or exacerbated by the trauma. Research on victims and survivors of trauma has focused on posttraumatic stress and other symptoms of distress such as depression and anxiety. Previous studies have looked at the effects of trauma on war veterans, sexual assault victims, disaster victims, those suffering from acute or chronic illness, law enforcement personnel, and survivors of law enforcement personnel killed in the line of duty.

In a move away from the deficit model of traumatization, current literature suggests that many people who experience a traumatic event grow psychologically, emotionally, and/or spiritually from the ordeal of surviving the trauma. Tedeschi, Park and Calhoun (1998) call the positive experiences after trauma Posttraumatic Growth (PTG). Researchers point to the opportunities inherent in trauma to build new and improved life structures resulting in positive changes in self-perception, interpersonal relationships and life philosophies. Because much of the focus of research has been on the deficit model of posttraumatic experiences, little is known about the processes of posttraumatic growth. While it is important to understand how people are negatively affected by traumatic experiences, it is equally important to understand the growth experiences of those who have positive experiences related to surviving the trauma. Interventions and services more closely tailored to the needs of the traumatized person can be developed if we have a deeper understanding of both negative and positive responses to trauma.

This study investigated the perception of personal growth among the survivors of law enforcement officers of line-of-duty death and the relationship of personal growth to spirituality, sense of coherence, posttraumatic stress symptoms, social support (COPS activities), mental health experiences, and demographic variables such as relationship to the deceased officer, age, sex, nature of the officer's death, ethnicity, time since the officer's death and reactions to the September 11, 2001 terrorist attacks. Members of the national organization, Concerns of Police Survivors (COPS), were invited to participate in the study. With the permission of the COPS Board of Directors, survivors on the COPS mailing list were sent a questionnaire and an informed consent to participate in the study.

Research questions included in this study:

1. How do demographic variables (age, sex, relationship, length of time since loss, etc.) correlate with posttraumatic growth?
2. What support services (i.e., COPS-sponsored activities) have been utilized by survivors and how does such social support correlate with posttraumatic growth?
3. How do spirituality involvement, beliefs and sense of coherence correlate with posttraumatic growth?
4. What is the relationship between self-reported posttraumatic stress symptoms and posttraumatic growth?

### **Assessment Instruments**

**Demographic Information Form** – included age, sex, relationship to officer, participation in COPS activities, nature of officer's death, race, mental health services utilized, and one item assessing stress due to events of September 11, 2001.

**Posttraumatic Growth Inventory (PTGI)** – A 21-item questionnaire asking subjects about changes occurring in their lives as a result of a crisis or trauma. Scores on individual items range from “0=I did not experience this change as a result of my crisis” to “5=I experienced this change to a very great degree as a result of my crisis”. Total scores range from 0 to 105, with the larger the number, the greater perception of personal growth.

**Orientation to Life Scale (SOC; Sense of Coherence)** – a 13-item questionnaire measuring sense of coherence (comprehensibility, manageability and meaningfulness). Scores on individual items range from 1 to 7; several items are reverse scored, and the total scores range from 13 to 91. Higher scores indicate a stronger sense of coherence.

**Spiritual Involvement and Beliefs Scale (SIBS)** – a 22-item questionnaire measuring subjects involvement and beliefs about spirituality. Item scores range from “1=strongly disagree” to “7=strongly agree”. Total scores range from 21 to 147.

**Posttraumatic Stress Checklist** – a 17-item checklist measuring subjective distress symptoms. Item scores range from “1=not at all” to “5=extremely”. Total scores range from 17 to 85.

## Methodology

A total of 9,228 questionnaires were mailed to survivors of law enforcement officer line-of-duty deaths. Survivors who had experienced the death of their law enforcement officer during 2001 were not included in the mailing to avoid the possibility of intruding upon their grief. A total of 1,204 questionnaires were returned for a return rate of 13%. While the return rate is rather low, the demographics of participants were comparable to the demographics of the entire mailing list, suggesting that the sample of returned questionnaires is representative of the members of COPS. There were 1,087 questionnaires analyzed, after removing incomplete or otherwise unusable surveys.

## Demographic Information

Table 1 presents the number and percentages of the demographic variables.

**Table 1**  
**Demographic Variables**

Variable	Number	Percentage
<b>Gender</b>	<b>N=1,081*</b>	
Males	248	22.9
Females	833	76.6
<b>Ethnicity</b>	<b>N=1,074*</b>	
Caucasian	926	85.2
African American	45	4.1
Hispanic American	43	4.0
Native American	42	3.9
Asian American	11	1.0
Other	7	0.6
<b>Relationship to Deceased Officer</b>	<b>N=1,085*</b>	
Parent	220	20.2
Child	115	10.6
Spouse	393	36.2
Sibling	228	21.0
Coworker	45	4.1
Other	84	7.7
<b>Nature of Officer's Death</b>	<b>N=1,046*</b>	
Felony Assault	590	54.3
Accident	432	39.7
Friendly Fire	23	2.1
Suicide	1	0.1

\*Totals less than 1,087 indicate missing data on that item.

The average length of time passed since the officer's death was 9.7 years. For the 337 spouses who reported length of marriage, the average was 12.2 years, with a range of less than 1 year to 40 years. The average age of participants in this study was 48.7 years, with a range from 19 years to 86 years.

## **Results – Research Questions**

### **1. How do demographic variables (age, sex, relationship, length of time since loss, etc.) correlate with posttraumatic growth?**

The results from this study suggest that posttraumatic growth occurs more often in the spouses of law enforcement officers killed in the line of duty than for other surviving family members. It may be that spouses, who have a day-to-day relationship with the loved one, experience a more profound change in their daily lives when the loss occurs. Tedeschi, Park & Calhoun (1998) suggest that posttraumatic growth is dependent upon a shake-up in a person's life. The struggle to survive, to live without the loved one, can provide the impetus for growth to occur.

Studies have shown contradictory results in sex differences in posttraumatic growth. Lehman et al., (1993), Park, Cohen & Murch (1996), and Tedeschi & Calhoun (1996) all report that women indicate more growth than men, while Polatinsky & Esprey (2000) and Collins et al. (1990) report no differences between the sexes in posttraumatic growth. The results of this study indicate strong, significant, statistical differences between women and men, with women reporting more growth than men. While there are obviously individual differences in how people react to trauma, this study provides support for the idea that women are more likely than men to experience growth after trauma. It is interesting to note that Tedeschi & Calhoun (1996) postulate that growth is directly related to distress whereby medium levels of stress appear to stimulate the most growth. Studies on sex differences in stress reactions following trauma also report that women experience more distress than do men. Therefore, it may be that women, who experiences higher levels of distress after trauma, will necessarily experience more growth than men.

Results of this study show no relationship between posttraumatic growth and race, age, and time since death.

### **2. What support services (i.e., COPS-sponsored activities) have been utilized by survivors and how does such social support correlate with posttraumatic growth?**

Social support is considered by most researchers to be a vital component of posttraumatic growth and resiliency in the face of trauma. Those who experience or perceive themselves as having adequate support from friends and family tend to report more positive experiences following trauma, less severe distress symptoms, shorter duration of distress, and use approach-coping mechanisms (Grummon, Rigby, Orr & Procidan, 1994; Holahan, Moos, Holahan, & Brennan, 1995; Moos & Schaefer, 1993). In addition to family and friendship resources, researchers report that trauma survivors who participate in community support groups and organizations engage in more active coping strategies (Lauer, Mulhern, Bohne, &

Camitta, 1985; Leserman, Perkins, & Evans, 1992). The results of this study suggest support for the social support hypothesis. There is a positive correlation between participation in COPS sponsored activities and higher levels of posttraumatic growth. As the number of activities participated in increases, so does reported posttraumatic growth. The COPS-sponsored activities are akin to the community support discussed by Leserman, Perkins & Evans (1992).

Table 2 presents the numbers and percentages of COPS-sponsored activities participated in by survivors of law enforcement officer line-of-duty death.

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**Table 2**  
**Participation in COPS sponsored activities**

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<b>Activity</b>	<b>Number</b>	<b>Percentage</b>
National Police Week Seminars	631	58.0
COPS Kids Activities-Police Week	96	8.8
Professional Counseling-COPS Kids	20	1.8
COPS Kids Summer Camp	33	3.0
Outward Bound-Young Adults	18	1.7
Siblings Retreat	14	1.3
Parents Retreat	53	4.9
Adult Children Retreat	11	1.0
Chapter/National Teambuilding	72	6.6
Benefits Awareness	64	5.9
Parole Letter Writing Campaign	122	11.2
Use of Grief Literature	396	36.4
Payments/Japanese/American Friends	88	8.1
Requests for Counseling Resources	30	2.8
Assistance for Nat'l Police Week Travel	144	13.2
Participation Awards-Hands on programs	33	3.0
Trauma of Law Enforcement Training	72	6.6

These results strongly suggest that the programming offered by Concerns of Police Survivors has a direct and positive impact on the survivors of law enforcement officer line of duty death.

### **3. How do spirituality involvement, beliefs and sense of coherence correlate with posttraumatic growth?**

It has been suggested in the posttraumatic growth literature that persons experiencing the most growth would also show a stronger sense of coherence. There was no support for this hypothesis in the analysis of the data from this study. In fact, parents of law enforcement officers killed in the line of duty and other relationships (i.e., in-laws) both had a statistically

significant stronger sense of coherence than did spouses, who reported the highest levels of posttraumatic growth. This result is surprising in light of the theorized connection between posttraumatic growth and one's sense of comprehensibility, manageability and meaningfulness.

There is evidence for a moderately low relationship between spiritual involvement and beliefs and posttraumatic growth. Tedeschi & Calhoun (1996) theorize that spirituality is definitely an aspect of posttraumatic growth and include spirituality as a subscale of their growth instrument. It is surprising that the relationship is of such low magnitude in this study.

#### **4. What is the relationship between self-reported posttraumatic stress symptoms and posttraumatic growth?**

The results of this study indicate that there is no correlation at all (.000) between self-reported posttraumatic stress symptoms and posttraumatic growth. This finding is very surprising given the theoretical supposition that a certain amount of stress is necessary for growth to occur. In other words, if there is no "push", there will be no movement toward change and growth. However, these results may be an artifact of the wording of the instrument. The respondents were asked about experienced stressful symptoms within the month prior to answering the survey questionnaire. If the participants had been asked to retrospectively report their levels of posttraumatic stress immediately following the death of the law enforcement officer, results may have been more in line with previous research and theory. This is a limitation of this current study.

#### **Additional Results**

It appears that children of law enforcement officers killed in the line of duty reported the least amount of spiritual involvement than any other relationship group. There is no data available on the exact timing of the death for the children and for some the death may have occurred during childhood, others during adulthood. However, all respondents were at least 18 years of age at the time of the study.

Parents of law enforcement officers killed in the line of duty had higher scores on the spirituality measure than children, siblings and coworkers. Spouses had higher scores than children and siblings, and other relationship (in-laws) had higher scores than children. Again, females scored higher than men on the spirituality measure.

Spouses had higher scores on the posttraumatic stress symptom checklist than siblings and other relationships (in-laws, etc.) This result is in line with results from other studies that suggest that, as mentioned earlier, posttraumatic growth is related to levels of stress. Females, again, score higher on this measure than do males. There is strong support in the literature for the notion that women are more open with their feelings, both positive and negative and therefore, the openness may influence scores.

The strongest relationship between measured variables was between sense of coherence and posttraumatic stress symptoms. This result is in line with the theory that persons who experience life as meaningful, comprehensible and manageable will be less likely to experience adverse stress reactions after trauma. What is surprising is the lack of relationship between sense of coherence and posttraumatic growth.

Survivors who received some type of mental health service after the loss of their law enforcement officer (individual, family or group therapy) showed higher levels of posttraumatic growth than did survivors who received no mental health services. While the relationship between mental health services received and posttraumatic growth was moderately low, it was statistically significant.

There was a moderately strong relationship between high levels of distress due to the terrorist attacks of September 11, 2001 and sense of coherence and posttraumatic stress symptoms. The relationship between responses to the terrorists attacks and sense of coherence was negative, indicating that those with higher sense of coherence experienced less distress due to the attacks. The relationship between posttraumatic stress symptoms and distress due to the terrorist attacks was positive, indicating that those with higher levels of distress about September 11 also reported higher levels of posttraumatic stress symptoms. These findings are in line with the literature in that persons who experience life as comprehensible, manageable and meaningful will be less likely to report high distress levels both in response to a specific event, or in general.

## **Conclusions and Recommendations**

The data generated in this study provides much needed information about the positive aspects of response to trauma. Specifically, social support appears to be an important component of individual growth. The finding that COPS-sponsored activities were strongly and positively related to higher levels of posttraumatic growth indicates that the programming of this organization is fulfilling an urgent need of survivors of law enforcement officers killed in the line of duty.

Recommendations for strengthening the programming offered to survivors include the continued provision of services for relationship groups other than spouses. Spouses of law enforcement officers killed in the line of duty show a significantly higher level of growth than other relationship groups. It is interesting to note that anecdotally, spouses report a great deal of attention following the law enforcement officer's death. Spouses are the center of attention at funerals and memorials, and are most often the recipients of benefits. Siblings, parents, adult children and co-workers may feel left out and ignored. Additionally, spouses have the opportunity to move into new relationships. Spouses can remarry; parents, siblings and children cannot fully "replace" the lost loved one. Different relationship groups may have very different responses to the loss of their law enforcement officers and thus may need interventions and programming designed to address those needs. The COPS organization currently provides programming for adult children, siblings, parents, kids and spouses. In line with the results discussed above, expanding these programs to reach more individuals

may have a profound positive effect on the individuals who experience such a devastating loss and may not receive an appropriate amount of sympathy and concern.

Mental health and social/community support services offered to survivors of traumatic loss possibly should include a focus on potential positive gains in addition to remediation of distressful responses and symptomology.

Mental health practitioners have become increasingly aware of the importance of addressing the spiritual needs of those in distress. The results of this study underline the importance of including and acknowledging these spiritual issues.

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