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The International Journal of Emergency Mental Health provides a peer-reviewed forum for researchers, scholars, clinicians, and administrators to report, disseminate, and discuss information with the goal of improving practice and research in the field of emergency mental health.

The International Journal of Emergency Mental Health is a multidisciplinary quarterly designed to be the premier international forum and authority for the discussion of all aspects of emergency mental health.

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#### **Editorial**

Disasters come in all shapes and sizes, span time frames ranging from moments to decades, and occur at the hands of man or nature - and sometimes an insidious combination of both. As I write this, Japan is still struggling to overcome the devastation wrought by an earthquake and tsunami earlier this year and the nuclear powerplant aftermath. The United States has experienced a series of wildfires, floods, and tornado damage this Spring and Summer, and within just a few days of writing this, family mass violence and domestic terrorism have struck around the world, from America to the Middle East to Norway. Thus, in mitigating the mental health effects of trauma, effective response to crises of all types must involve prevention, intervention, and postvention, and this issue of the International Journal of Emergency Mental Health reflects all three facets.

The first two articles in this issue offer alternative postdisaster intervention strategies, covering a wide range of disaster scenarios from a varied international perspective. Crepeau-Hobson & Drennen describe the Colorado Crisis Education and Response Network (CoCERN) for delivering quick, effective service to disaster victims. The article by Papanikolaou and colleagues explains the types and patterns of psychological traumatization that have occurred following

a set of wildfires in Greece and makes recommendations for responding to victims.

Moving from *post*vention to *pre*vention, providing mental health screenings through the military for underserved and culturally diverse populations is the subject of the article by Moorecook and colleagues. Prevention of stress is also organizational. Violanti discusses a unique perspective on law enforcement discipline that relies less on punishment than on proactive training and education and on positive reinforcement for constructive behavior. In response to tragedy, some individuals simply reach the end of their rope and contemplate taking their own lives. Miller offers some guidelines for recognizing and responding to suicidal behavior that emphasize the intervention leg of an effective emergency response system. For all disasters – large or small, global or personal – the guiding principle is: first, help them survive; then, help them recover.

> Laurence Miller, PhD July 25, 2011



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## The Colorado Crisis Education And Response Network: **An Analysis Of Policy And Practices**

Franci Crepeau-Hobson University of Colorado Denver

Curt Drennen Colorado Department of Human Services Division of Behavioral Health

Abstract: The Federal government has recognized the importance of including behavioral health in disaster response plans and policies. Many states have responded to these directives with the development and implementation of disaster behavioral health response teams. The Colorado Crisis Education and Response Network (CoCERN) is a statewide asset that is based in community partnerships formed to deliver effective, efficient, and professional disaster behavioral health services to communities impacted by a disaster. Using the K. McInnis-Dittrich model of policy analysis, this paper analyzes this approach to disaster behavioral health response. Strengths and weaknesses of the program, as well as implications for practice are discussed. [International Journal of Emergency Mental Health, 2011, 13(1), pp. 3-10].

**Key words:** behavioral health, disaster response, policy analysis

Although the majority of individuals impacted by a disaster will recover normally without any intervention, in some instances individuals will suffer an adverse psychological consequence as a result of experiencing such an event (Everly, Hamilton, Tyiska, & Ellers, 2008). Providing affected populations with mental health interventions can promote their recovery following these catastrophes (Everly et al., 2008). In recognition of the adverse impact and need for intervention, disaster behavioral health practices have increasingly been acknowledged as an integral part of disaster response (Sacher, Fried, & Bell, 2007). For example, in its recommendations on mental health and mass violence, the

Franci Crepeau-Hobson, PhD, is an Assistant Professor in School Psychology at the University of Colorado, Denver. Curt Drennen, PsyD, is the Behavioral Health Coordinator of the Colorado Department of Human Services Division of Behavioral Health. Correspondence regarding this article should be directed to Dr. Crepeau-Hobson at franci.crepeau-hobson@ucdenver.edu.

National Institute of Mental Health (NIMH) recommended that mental health services be integrated within the overall disaster response plan (NIMH, 2002).

Recent disasters in the United States and around the world further highlight the need for behavioral health services as a necessary component of disaster policy and disaster response (Becker, 2009). For example, the prevalence of disaster-related mental health problems in survivors of Hurricane Katrina is estimated to be between 20% and 35% (North et al., 2008; Kessler et al., 2008; Kim, Plumb, Gredig, Rankin, & Taylor, 2008; Wang et al., 2007). The United States Federal Government has taken note of these issues. Emergency Support Function #8 (Public Health and Medical Services Annex) of the U.S. Department of Homeland Security's National Response Plan (U.S. Department of Health and Human Services; DHHS, 2004) explicitly includes behavioral health as part of the policy. Moreover, in 2007 the federal government specifically recognized behavioral health

response as an integral part of the National Strategy for Public Health and Medical Preparedness in a Presidential Directive (Homeland Security Presidential Directive-21; HSPD-21, 2007). According to HSPD-21,

The impact of the "worried well" in past disasters is well documented, and it is evident that mitigating the mental health consequences of disasters can facilitate effective response. Recognizing that maintaining and restoring mental health in disasters has not received sufficient attention to date, within 180 days after the date of this directive, the Secretary of Health and Human Services, in coordination with the Secretaries of Defense, Veterans Affairs, and Homeland Security, shall establish a Federal Advisory Committee for Disaster Mental Health. The committee shall consist of appropriate subject matter experts and, within 180 days after its establishment, shall submit to the Secretary of Health and Human Services recommendations for protecting, preserving, and restoring individual and community mental health in catastrophic health event settings, including pre-event, intra-event, and postevent education, messaging, and interventions (Mass Causality Care Section, part 31).

As a result of HSPD-21, the Disaster Mental Health Subcommittee was established under the National Biodefense Science Board (NBSB). The NBSB provides recommendations to the Secretary of the U.S. Department of Health and Human Services (DHHS) regarding protecting, preserving, and restoring individual and community mental health in catastrophic events with the long term goal of enhancing capabilities at the State and local level for addressing disaster mental health (DHHS, 2008).

#### **CoCERN**

Both prior and in response to the establishment of the Disaster Mental Health Subcommittee at the federal level, individual states began to implement their own policies and procedures related to meeting the behavior health needs of community members following a disaster. In Colorado, disaster behavioral health response has become an important part of state disaster policy. In 2006, the Colorado Department of Human Services Division of Behavioral Health called together a group of 59 individuals representing 44 different agencies that either had direct response capacity or held a close interest in disaster behavioral health response. In addition to the Colorado Department of Human Services Division

of Behavioral Health, these agencies included the American Red Cross, The Colorado Society of School Psychologists State-Wide Crisis Response Team (CSSP CRT), the Salvation Army, Community Mental Health Centers, as well as several others. Together, these agencies formed a planning council. The efforts of the members of the planning council were focused on developing a network of disaster behavioral health expertise and resources that can be deployed together effectively in times of need. The goals of the group included increasing the effectiveness of educational and response efforts and decreasing the duplication of effort, and protecting responders, as well as survivors in the process of response.

The result of this work was the development of the Colorado Crisis Education and Response Network or CoCERN and the CoCERN Protocol and Guidance document (Drennen, 2009). Unlike other states, such as Kentucky, that have formed crisis response teams made up of individual members (Commonwealth of Kentucky, 2007), CoCERN is made up of pre-existing, functioning response teams that respond to events as needed – when the lead agency is unable to meet all the behavioral health needs of a community following a large scale event. The CoCERN Protocol Document addresses core disaster behavioral health issues and functions as a guideline in the case of a disaster or crisis.

The Protocol document includes a variety of components. The Contextual Framework lays out the foundational elements of CoCERN, including the vision, mission, and values statements; describes the partner agencies; and lists several situational and response assumptions. The Command section of the Protocols and Guidance document describes how agencies can activate the partnership to bring in other resources from CoCERN to support the behavioral health aspects of the disaster response. It outlines how to select a behavioral health commander and specifies duties for that position. The Resource Management and Deployment section of the Protocol and Guidance document covers the primary issues of what happens in the field, including the structure for teams in the field and how teams should interact with each other and with other parts of the response effort. This section delineates the processes for deployment and response activities in the field. The Communications section describes the basic processes of initiating a CoCERN response as well as several aspects of internal and external communications. Topics include how to work behavioral health response issues into the public information and joint information center processes, as well as issues regarding technologies available for communications. Finally, the Credentialing section of the CoCERN Protocol and Guidance document is a critical part of the interagency partnership. It outlines two basic levels of training and credentialing requirements.

Most definitions of social policy emphasize policies that are developed through government or public policies, while a few extend the definition to include policies made by professional organizations (Ginsberg, 1994). According to Barker (1991), social policies include societal activities and principles that direct intervention and regulation efforts related to relationships between individuals, groups, communities, and social institutions. Social policies target social problems – difficulties that affect large numbers of individuals or an entire society (Barker). Typically, the government will enact a public policy in response to a public problem; but, in rare occasions, policy will begin as a grassroots effort by individuals or professional associations to address a social problem and then subsequently it is written into policy (Ginsberg, 1994).

Meeting the behavioral health needs in the community following natural and manmade disasters and crises in Colorado, such as the Columbine shootings and large-scale wildfires, had been a significant challenge as Colorado lacked a coordinated plan for the response. Difficulties arose in these situations as a result of having multiple behavioral health agencies deployed to the scene, as well as spontaneous responders coming to the site. The lack of a command structure and means of communication between groups often resulted in the duplication of efforts and services and a great deal of inefficiency. CoCERN and its corresponding protocol document emerged as a result of the efforts of the CoCERN partners to resolve these issues. Following its development, CoCERN was written into the Colorado State Emergency Response Plan and thus is currently state policy.

#### CoCERN in Action

Following is a detailed description of a disaster and the subsequent behavioral health response utilizing the CoCERN program. This example demonstrates the activation and functions of this model of behavioral health response.

On May 22, 2008 at approximately 11:30 am MDT, an F3 tornado developed and traveled from southeast Weld County in Colorado up through the northwestern part of the state. The tornado traveled 32 miles and heavily damaged several communities, the most notable being the town of Windsor,

Colorado. The disaster behavioral health response began with the State Emergency Operations Center activation, pulling in all state departments to support the response. Upon activation, the state disaster behavioral health coordinator within the Department of Human Services Division of Behavioral Health contacted several CoCERN Partners, including Cooperating Partners: The American Red Cross, The Salvation Army and The Colorado Society of School Psychologists; along with Assisting Partners: Larimer Crisis Counseling and Resilience Enhancement Team and NorthRange Behavioral Health. These Partners together formed a Behavioral Health unified command and identified the following primary behavioral health missions to support community and responder adaptive functioning.

- Staffing of the community shelter at The Ranch
- Staffing of the community assistance center at the Windsor Community Center
- Assessing school needs
- Support staffing to the FEMA preliminary damage assessment team
- Community outreach.

Working in partnership and receiving consultation/ support from the Colorado Department of Human Services' Behavioral Health Services Disaster Response and Planning work unit, crisis counseling was provided in the following ways and venues.

- On Thursday May 22, activities focused on two available shelters, one located in Windsor, the other located at the Budweiser Events Center – The Ranch. Due to power failures, the first shelter was closed and all individuals were transported to the second shelter at The Ranch. These shelters were open for two days.
- The Weld County Emergency Operations Center (EOC) requested crisis counselors be available at the Crisis Center, located in the Community Recreation Center starting at noon on May 23. A team of crisis counselors was continuously available and conducting outreach at this community from that point of time.
- FEMA requested crisis counselors to be associated with their Preliminary Disaster Assessment teams to be available for Friday, May 23 and Saturday, May 24. The consortium provided 6 counselors to three teams during the initial assessments.

- On May 24, the Weld County EOC requested support to the county assessor as homes were identified as unlivable. Crisis Counselors spent two days walking neighborhoods in partnership with the assessors.
- On May 27 FEMA began opening its Disaster Recovery Center (DRC) and requested crisis counselors be made available. Crisis counselors provided support at the DRC beginning the afternoon of May 27.

In total, during the first 10 days of the response, initial crisis counseling efforts resulted in the provision of 424 hours of crisis counseling and outreach activities by 70 volunteers between May 22 and June 1, 2008. The sum of these services was 1029 crisis counseling contacts. These counts include 75% of staff responding. The remaining 25% have yet to report on their activities. On Saturday May 31, the shelter and support center closed, leaving the FEMA Disaster Recovery Center to handle the remaining large scale support for the community.

The unified command aspect of CoCERN was crucial to the identification of response goals and the management of resources from the associated partners. A Red Cross team leader deployed from Washington State contacted the Division of Behavioral Health and commented that in her fifteen years of volunteering with ARC she had never seen such an effective, efficient, and professional behavioral health response, especially at the level of agency partnership between community mental health and Red Cross. Within 16 days, the state was granted a FEMA-funded Crisis Counseling Program Grant, allowing CoCERN to redeploy and turn responsibility for recovery efforts over to the community mental health center.

#### Analysis of CoCERN as policy

The K. McInnis-Dittrich model of policy analysis (McInnis-Dittrich, 1994) was utilized to evaluate the policies of CoCERN. This model includes eight elements of analysis:

- A description of the approach/policy. This summary
  of the program sets the stage for the analysis and
  includes the goals or intentions of the policy, as well
  as the attitudes and values that are reflected in the
  policy.
- A description of the need(s) addressed by the policy or program. This step in the analysis examines the social problem that prompted the development of the

- policy and how that need is defined by the program. Describing how the policy is rationally connected to meeting the need is included in this step.
- An assessment of the policy's strengths and weaknesses. This aspect of the model includes identifying program strengths and looking for evidence that the policy has accomplished its original goals, as well as identifying the elements of the policy that are in need of improvement.
- An analysis of the policy's logic. This element includes consideration of whether or not the program and policy are logically connected to the goals it is intended to address and if the program is a logical expression about what is known about effective service delivery.
- A description of the financial support for enactment and sustaining the policy. The analysis includes identification of funding sources for program implementation and maintenance, as well as an evaluation of the program's cost effectiveness.
- An analysis of the innovation for adjusting the policy as necessary. Questions here center around how much the program would need to change to be more effective.
- An evaluation of the policy's attention to social justice. Consideration of the fair application of the policy and access to the program and what it offers to all members of society is central to this element.
- A description of one's professional perceptions of the policy. The final step in the analysis is describing the authors' reaction to the policy, including its problems and benefits.

Approach and Need. CoCERN was formed in an effort to deliver effective, professional disaster behavioral health services to the people of the state of Colorado and neighboring states and communities. In contrast with other groups of professionals involved in disaster response, such as fire and police, emergency management, and emergency medical personnel, behavioral health disaster response has historically lacked a coordinated framework. CoCERN was developed with several key foundational elements in mind. First, Co-CERN is not an entity in and of itself. It is a partnership and an agreement to work collaboratively and cooperatively in planning and response and provides an umbrella structure

for all behavioral health disaster response. Second, CoCERN is designed for the immediate response period, not the long term recovery of those impacted as the longer term needs are best left to local resources in the affected community. Finally, although the Colorado Disaster Behavioral Health Services Program provides the leadership and supported the development process, CoCERN is not a state asset – it is a community asset. The CoCERN Protocol and Guidance document (Drennen, 2009) was developed by the CoCERN Planning Council partnership to provide a contextual framework and guidance in relation to issues central to effective behavioral disaster response including command, deployment, communications, and credentialing.

Logic. CoCERN is proposed as a collaborative and cooperative network for disaster behavioral response that is made up of a variety of established crisis response teams that already have ties to the community. The team is activated if local disaster behavioral health response resources are depleted or overwhelmed. When requested, the member organizations provide support and services to the lead local responding behavioral health agency, survivors, responders, responder families, and the public following any large scale event. This process allows for continued local control and prevents problems related to duplication of services and inefficiency that results from the deployment of multiple responders without a means of coordinating efforts. CoCERN addresses the core issues of disaster behavioral health response: Command, Resource Management, Communications, and Credentialing. The Protocol and Guidance document (Drennen, 2009) adopted by the state of Colorado emphasizes evidence-based approaches to disaster behavioral health and is aligned with National Incident Management System's Incident Command System (NIMS/ICS). These features promote both a sense of legitimacy in the document and consistency in disaster behavioral health practices.

Financial support. There are no specific provisions for financial support within the context of the CoCERN Protocol and Guidance Document, rendering the sustainability of the program somewhat questionable. However, the state of Colorado does support the provision of disaster behavior health response efforts in some respects. For example, the Colorado Department of Public Health and Environment (CDPHE) currently manages a mandated, statewide volunteer database, the Colorado Volunteer Mobilizer (CVM) for medical and public health professionals (CDPHE, 2008). Individual team members of CoCERN member organizations

can be contacted and deployed via this database as needed. In addition, as the state's lead agency for disaster behavioral health, the Disaster Behavioral Health Services program of the Emergency Preparedness and Response Division, is supported in serving as the coordinating partner of CoCERN. While funds are not specifically allocated to CoCERN coordination as part of the state's emergency response plan, financial support for at least the coordination piece exists. In addition, each member organization has its own source(s) of funding (e.g., membership dues, donations, grants, etc.).

Innovation. CoCERN's unique structure allows for meeting the disaster behavioral health needs of the community by capitalizing on the strengths of existing response teams and practices. These teams have not been required to change their current practices nor give up their identity or any turf; each remains the lead response agency for those events to which they are the first to be deployed and other teams/agencies are not called upon to respond unless the lead response team requests it. Utilizing this collaborative partnership is a unique approach to providing disaster behavioral response services; no other state in the country has such a structure. In addition, some flexibility is built into CoCERN training and credentialing requirements to accommodate some differences in orientation and practices.

Assessment. There are a number of strengths of CoCERN and its corresponding protocol document. First, CoCERN capitalizes on pre-existing strengths and community ties of established teams of behavioral health responders. The CoCERN protocol document was developed and written by all of these stakeholders, including Colorado's Disaster Behavioral Health Services, the Red Cross, the Colorado Society of School Psychologists, the Salvation Army, victim's assistance, and community mental health centers. Further, during the protocol development, individuals from each agency had an opportunity to develop collegial relationships with professionals from other agencies and to learn what each had to offer. This encourages these individual agencies to coordinate, plan and interact more effectively. Cooperation, coordination, and collaboration are crucial in the delivery of early disaster behavioral health services (Everly et al 2008).

Second, consistent with the U.S. Department of Homeland Security's (DHS) National Incident Management System (NIMS) and its Incident Command System (ICS) standardized structure (DHS, 2008), the CoCERN guidelines address the two key concepts of division of labor and span of control, as well as the core issues of disaster behavioral

health response: command, communications, resource management, and credentialing. In relation to command, the CoCERN document describes procedures for establishing a unified behavioral health command structure and identifies specific roles and responsibilities of behavioral health command personnel. It provides guidelines to enable agencies with different geographic and functional responsibilities to coordinate, plan, and interact effectively. As a team, the unified command structure overcomes much of the inefficiency and duplication of effort that can occur when agencies from different functional and geographic jurisdictions operate without a common system or organizational framework (U.S. Department of Homeland Security; DHS, 2004).

Effective communication must be a priority in disaster response (Kahn & Barondess, 2008) and this is the case with CoCERN. Communications issues addressed in the protocol include activation of CoCERN and the utilization of the Colorado Volunteer Mobilizer, core lines of communication within the group and connection to the larger incident command structure, and issues related to technology and low tech communications as well as interoperability. Communications interoperability allows emergency management/response personnel and their affiliated organizations to communicate within and across agencies and jurisdictions (DHS, n.d.). Recommendations are provided concerning the utilization of a Behavioral Health Information Officer so that public information surrounding an incident can be filtered through a behavioral health lens. This will help to ensure that vital behavioral health information is included in all public announcements disseminated from the site.

The Resource Management and Deployment section of the CoCERN document identifies key structures of responding teams and core response activities, including deployment. A variety of tasks are delineated: inventorying and tracking defined resources, activating systems/ resources, dispatching resources, and demobilizing of resources. Resource management is a key element of community emergency response (Edwards, 2009). This is detailed nicely in the document.

The importance of deploying behavioral health professionals who have adequate training and expertise in disaster behavioral health response cannot be overstated; training and credentialing of responders are essential to the quality of response (Sederer, Ryan, Gill, & Rubin, 2005). To be effective, responders must be both adequately prepared and culturally competent (Halpern & Tramontin, 2007). Specialized training in a variety of relevant areas, including

the NIMS ICS, psychological first aid, and a range of crisis intervention strategies, is necessary (Everly et al., 2008). The Credentialing section of the CoCERN Protocol and Guidance document is a critical part of the interagency partnership. It sets the basic floor training values for individuals who wish to be a behavioral health disaster responder and outlines two basic levels of credentialing. Developed with core competencies in disaster mental health (Everly, Beaton, Pfefferbaum, & Parker, 2008) in mind, the document outlines the specifics for these levels of credentialing as well as expectations for further training and maintenance of the credential. The training requirements specific to disaster behavioral health response include a range of options aligned with those required by CoCERN partnership organizations, such as the disaster mental health courses required by the Red Cross and the PREPaRE model of school-based crisis response (Brock, Nickerson, Reeves, Jimerson, Lieberman, & Feinberg, 2009). In an effort to meet the needs of large communities following a large scale all hazards event, many mental health professionals who are deployed lack skills in trauma and crisis counseling (Reid, Ruzycki, Haney, Brown, Baggerly, & Mescia (2005). By setting standards for training and credentialing and detailing capacity expectations of disaster behavioral health responders, the CoCERN guidelines seek to avoid these types of problems.

There also are significant weaknesses in CoCERN and its protocol and guidelines document. The lack of funding and any plan for sustainability is of particular concern. As leadership changes at the Division of Behavioral Health and CoCERN member organizations, it is possible that maintenance and coordination of CoCERN will fall to the wayside. Further, the guidelines may feel more cumbersome than supportive and the CoCERN may feel as though their clinical judgment and decision-making is not honored and they may resent the lack of autonomy to which they have been accustomed.

In addition, at this point, CoCERN has only been tested to a limited degree in terms of real all hazards events. These include a response to a county ravaged by a tornado, a school shooting, an apartment fire, and a major wild fire that destroyed 70 homes. At this point, no formal evaluation process is in place and, consequently, there is no quantitative data related to the effectiveness of the CoCERN response to these events. This is a common problem as the unpredictable and devastating nature of some disasters makes it difficult to include research and evaluation components into disas-

ter behavioral health response and interventions (Regehr, Roberts, & Bober, 2008). However, the CoCERN team has met following each of these events to debrief and conduct informal evaluations of these responses. Anecdotal and informal feedback from individuals both within and outside of CoCERN has been positive and indicates that these responses were well coordinated and well received. Regardless, the lack of formal, coordinated evaluation procedures and the lack of empirical support for program effectiveness are notable weaknesses of the program.

Social justice. Although the central focus of social justice definitions tends to vary across disciplines, common concepts across these definitions include the notions of equity or alleviating disparity and the redistribution of resources (Vera & Speight, 2003). In this context, CoCERN and its guidelines promote this notion. CoCERN is designed to respond to the mental health needs of communities following disasters (e.g., bioterrorism, manmade or natural disasters) via the implementation of evidence-based practices. While not explicitly stated, an intended consequence of CoCERN is equitable access to behavioral health disaster response services for all members of an affected community.

Professional reaction, conclusions and implications. The issues of disaster behavioral health response are complex. Each disaster is unique, as is the community in which it occurs. Although normal recovery is generally expected, any natural or human caused disaster has the potential to affect the psychosocial functioning of the community. Thus, it is crucial that behavioral health services be integrated into disaster policy and disaster response.

The state of Colorado has developed a unique approach to meeting the disaster behavioral health needs of its citizens. The Colorado Crisis Education and Response Network (CoCERN) is a multi-agency coordination entity that operates within a unified command structure to coordinate the provision of disaster behavioral health services during an emergency. The use of pre-existing, standing response agencies/teams is a strength of the program. Because community emergency and behavioral health personnel and resources may be personally impacted by a disaster (Regehr et al., 2008), additional, outside resources will need to be available. Further, because most of the CoCERN partners are already connected to communities, the state, and/or region, the unique disaster-related needs of various communities may be better understood and met. Written into the Colorado State Emergency Operations Plan, CoCERN is intended to be an

inclusive, organized, collaborative, and cooperative network of trained resources to address the immediate behavioral health needs of communities affected by an all-hazards event. The CoCERN Protocols and Guidelines document (Drennen, 2009) address all core issues of disaster behavioral response including command, communications, resource management, and training and credentialing. The structure of CoCERN is aligned with the NIMS ICS concepts and organizational processes to allow for a more effective and efficient response.

Although there are some weaknesses of this approach related to sustainability and evaluation, CoCERN is a model for other states that are looking to develop a coordinated, comprehensive plan for disaster behavioral health response.

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## Psychological Distress Following Wildfires Disaster in a Rural Part of **Greece: A Case-Control Population-Based Study**

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Abstract: Psychological distress is common in the aftermath of a disaster. This study investigated psychological distress and morbidity in individuals who had experienced severe exposure to a wildfire disaster in a part of Greece. The study was a cross sectional case control of an adult population (18-65) years old). Face to face interviews were used in the collection of the data which were demographics, the type and number of losses and the Symptom Checklist 90-Revised for assessment of psychological symptoms. The results showed that those exposed to wildfires disaster scored significantly higher on the symptoms of somatization, depression, anxiety, hostility, phobic anxiety, and paranoia; had significantly more symptoms of psychopathology and were more distressed, compared to controls. Risk factors for potential psychiatric cases were those exposed to disaster, those who had lower education, and those who were widowed. It was concluded that wildfires may cause considerable psychological symptoms comparable to other disasters and there are reasons to create services to help and improve the mental health of those affected. [International Journal of Emergency Mental Health, 2011, 13(1), pp. 11-26].

Key words: wildfires, Greece, psychopathology, adults, psychological distress

#### INTRODUCTION

Research across a variety of disaster types has identified that psychopathological disturbances are common in the aftermath of a disaster (Norris, Friedman, Watson, Byrne, Diaz, & Kaniasty, 2002). Those psychological symptoms can range from very mild and transient such as altered be-

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havior or acute distress to severe psychiatric disorders such as major depression and suicidality (Ursano, Fullerton, & Benedek, 2009). For instance, 32% of London residents reported altered behavior (traveling less) after the July 7th 2005 bombing in London and 31% reported distress (Rubin, Brewin, Greenberg, Simpson, & Wessely, 2005). Similar findings were reported after the September 11 terrorist attacks in the U.S. (Lawyer, Resnick, Galea, Ahern, Kilpatrick, & Vlahov, 2006; Schuster et al., 2001). Regarding natural disasters, a high percentage of psychological distress has been reported; immediately after Hurricane Katrina, half of the adult population who were still living in New Orleans had significant psychological distress while 44% of those displaced remained distressed even two years later (Kessler,

Galea, Jones, & Parker, 2006). Similarly, high percentages of psychological distress have been reported in earthquakes; after the Niigata-Chuetsu earthquake in Japan 2004, a proportion of 59.3% of the affected population reported with psychological distress (Kuwabara et al., 2008). However, we need to be cautious and to distinguish appropriate stress reactions from mental illnesses (Wessely, 2004; Whaley, 2009) as some of the psychological symptoms tend to cease after a few months (Kuwabara et al., 2008; Wessely, 2004).

In addition, sleep disturbances have been reported in the disaster survivors (Norris, Friedman, Watson et al., 2002). Sleep disturbances can be presented together with other symptoms of anxiety or grief but also can be due to a repeated disaster event, such as aftershocks in earthquake disasters (Bland, O'Leary, Farinaro, Jossa, & Trevisan, 1996). However, it was found that sleep disturbances are decreased if not part of a psychiatric disorder, but those exposed to a disaster may still have more sleep disturbances compared to controls even after 18 months from the disaster (Grievink et al., 2007).

Furthermore, survivors of a disaster are often presented with medically unexplained symptoms and somatization regardless of the type of disaster, not only immediately after but also in the years following the disaster (Engel, 2001; van den Berg, Grievink, Yzermans, & Lebret, 2005). Somatic symptoms may be part of an overall psychopathology or they may be disaster-related. For instance, dyspnea can be due to anxiety or to a panic attack but also can be due to the inhalation of fumes during a fire disaster. It has been suggested that the presence of posttraumatic stress symptoms is a perpetuating factor that maintains or exacerbates unexplained physical symptoms (van den Berg et al., 2005). However, the relevant results are contradictory. Slottje and colleagues (2008) reported that post-disaster somatization symptoms were unrelated to posttraumatic stress symptoms among firefighters and police officers, whereas Spinhoven and Verschuur (2006) found that persistent fatigue was associated with increased psychopathology in rescue workers and residents involved in the Bijlmermeer aviation disaster.

Moreover, increased rates of depression or anxiety or of both depression and anxiety together have been reported in those exposed to disasters (Norris, Friedman, Watson et al., 2002). Across studies, the average post-disaster prevalence rates for depression and general anxiety have been reported to be 26% and 40%, respectively, resulting in a 17% increase in the rates of psychopathology compared to controls

(Rubonis & Bickman, 1991). For instance, a year after the 2004 tsunami the prevalence of depression and anxiety in the affected population was 16% and 30%, respectively (Hollifield, Hewage, Gunawardena, Kodituwakku, Bopagoda, & Weerarathnege 2008), in floods disasters (UK) the prevalence was 35.1% for depression and 24.5% for anxiety (Mason, Andrews, & Upton, 2010), in earthquake disasters, such as the one in Mexico (1985), the prevalence was 13% for depression and 19% for anxiety (de la Fuente, 1990); while a lower percentage of depression (11.6%) was reported in the aftermath of the Chi-Chi earthquake in 1999 in Taiwan (Chou et al., 2007).

Furthermore, obsessive-compulsive symptoms also have been reported after disasters, e.g., in the Enschede fireworks disaster in Netherlands at a rate of 30.1% (van den Berg, Grievink, Yzermans, & Lebret 2007), in the 1992 earthquake in Turkey (Kisac, 2006), while a very high prevalence rate (94.6%) was observed among young women after the Wenchuan earthquake (Liu et al., 2010). These symptoms have been identified as risk factors for the development of post-traumatic stress disorder (Yang et al., 2003) or for menstrual abnormalities (Liu et al., 2010).

Symptoms of hostility and anger have also been described as often presented in the victims of a disaster (Lopez-Ibor, 2006). Posttraumatic stress disorder (PTSD) incorporates symptoms of irritability and anger but there is evidence that anger and hostility may be distinguished from other symptoms of PTSD in following a more protracted course (Orth, Cahill, Foa, & Maercker, 2008; Silove et al., 2009).

Finally, posttraumatic stress disorder is the most commonly studied outcome in the aftermath of disasters. (Norris, Friedman, Watson et al., 2002). Historically this goes back to the investigation of Stierlin who was possibly the first who examined the survivors of the earthquake in Messina in 1907 in a rigorous scientific way and found that 25% of the survivors had sleep disturbances with nightmares and intensive images (McFarlane, van Hooff, & Goodhew, 2009). However, it has been argued that too much emphasis has been given to PTSD although other psychiatric problems, as reported above, are very common but less often studied after disasters (Hussain, Weisaeth, & Heir, 2010; Weiss, Saraceno, Saxena, &van Ommeren, 2003). A recent study also calls into question the concept of PTSD as all of the symptoms of this disorder are highly correlated with general distress (Marshall, Schell, & Miles, 2010).

Nevertheless, it has been emphasized that different kinds of disaster may have a different impact on mental health (Norris, Friedman, & Watson, 2002). It has been suggested (Weiss et al., 2003) that it is important to distinguish continuing situations (e.g., ongoing war, ongoing drought), which may require different kinds of interventions than timelimited, acute disasters (e.g., earthquakes, wildfires), because chronic disasters result simultaneously in acute and ongoing disaster-related problems. Likewise, the consideration of the destructiveness of the disaster and not only the type of disaster has been stressed, to predict the extent of problems and to indicate what interventions may be needed (Norris, Friedman, & Watson, 2002; Norris, Friedman, Watson et al., 2002).

However, wildfires have been a relatively recent focus in the natural disasters literature as a result of the last catastrophic fires in Australia (McFarlane, Clayer, & Bookless, 1997; Morrissey & Reser, 2007) and the United States (Delfino et al., 2009; Jenkins, Hsu, Sauer, Hsieh, & Kirsch, 2009; Moritz, Morais, Summerell, Carlson, & Doyle, 2005) (Delfino et al., 2009; Moritz, Morais, Summerell, Carlson, & Doyle, 2005). Wildfires lead to important economic, social, and environmental losses, especially in areas of the Mediterranean climate where they are of a high intensity and frequency (Oh & Reuveny, 2010). Although relevant studies support an increase in psychopathology following wildfires (Maida, Gordon, Steinberg, & Gordon, 1989; Marshall, Schell, Elliott, Rayburn, & Jaycox, 2007; McFarlane et al., 1997), they differ in the specific syndromes that are investigated, mainly PTSD, and in the population in which they focus, mainly children and adolescents (McDermott, Lee, Judd, & Gibbon, 2005; McFarlane, 1987; Reijneveld, Crone, Verhulst, & Verloove-Vanhorick, 2003).

In August of 2007 an intense and destructive wildfire broke out in the Peloponnesus peninsula in Greece. Sixtyseven people died and 1.500 square kilometers of forests. olive trees, farmland, and villages were burned in these fires (EM-DAT, 2008). A national disaster was declared and the areas affected by the fires were designated for further support. This was perhaps the first time in Greece in which mental health teams were called upon to support the suffering population aiming to restore psychological and social functioning of individuals but also fire-fighters. It was also for the first time that the need for an effective public health planning for disasters had been recognized in order to deliver specific services and to contribute sufficiently to the resources for treating mental disorders, reducing symptoms, and preventing future problems to those affected by the disaster. Thus, the aims of the present study were fourfold: a) to investigate a broader spectrum of mid-term psychological and psychiatric morbidity in individuals who had experienced severe exposure to a wildfire disaster in a part of Greece in 2007; b) to investigate the differences in psychopathology between those exposed to disaster and those who did not; c) to estimate the association of losses as a result of the fire with different psychological symptoms; and d) to identify risk factors for post disaster psychological distress.

#### **METHODS**

#### Design of the study - Participants

This study was a cross-sectional case-control study. The cases were drawn from residents who lived in the five prefectures characterized as disaster areas by the Hellenic Republic Ministry of Interior (Ministry of Interior, 2007). The number of respondents surveyed in each prefecture was proportional to its adult population. A multistage sampling with replacement method was followed. Similarly, the controls were matched to the cases regarding gender, age, education, marital and regional distributions but they were drawn from nearby unaffected areas. Eligible participants were residents aged from 18 years to 65.

#### Measurements

- 1. Demographic characteristics (age, gender, educational background, marital status, occupation). Age was coded in age groups; similarly, gender, education, marital status, occupation (see also Table 1).
- Symptom Checklist 90-Revised (Derogatis, 1992). The Symptom Checklist 90-Revised (SCL-90-R) is one of the most commonly used screening inventories for the assessment of psychological difficulties (Holcomb, Adams, & Ponder, 1983). It has 90 items, which measure the degree of distress experienced by an individual during the previous 7 days, using a 5-point scale (0 to 4) that ranges from "not at all" to "extremely." The SCL-90-R can be scored for nine symptom dimensions. In addition to the nine scales, there are three summary global indices that are computed. The Global Severity Index (GSI), is the sum of all the nonzero responses, divided by 90 (if there are no missing responses) and reflects both the number of symptoms endorsed and the intensity

Table 1. Demographic Characteristics of the Samples								
		Cases	(n = 353)	Controls	s (n = 262)	Pearson X <sup>2</sup>		
		Count	Column n %	Count	Column n %			
Gender	male	182	51.6%	131	50.0%	$\chi^2$ (1, N = 615) =		
	female	171	48.4%	131	50.0%	0.15, <i>ns.</i>		
Age group	18-25	59	16.7%	36	13.7%			
	26-35	79	22.4%	59	22.5%	0.2/4 N 0.15) =		
	36-45	72	20.4%	59	22.5%	$\chi^{2}(4, N = 615)^{=}$ 1.32, ns.		
	46-55	76	21.5%	55	21.0%	1.52, ns.		
	56-65	67	19.0%	53	20.2%			
Education	Primary school	101	28.6%	72	27.5%	$\chi^2(2, N = 615)^{=}$		
	Secondary school	222	62.9%	152	58.0%	5.56, <i>ns</i> .		
	College/university	30	8.5%	38	14.5%			
Marital status	married	240	68.0%	180	68.7%	$\chi^2(3, N = 615)^{=}$		
	single	99	28.0%	72	27.5%	0.04, <i>ns</i>		
	divorced	4	1.1%	3	1.1%			
	widowed	10	2.8%	7	2.7%			
Occupation	professional occupation	59	16.7%	46	17.6%	$\chi^2(2, N = 615)^=$		
	sales and customer service occupation	57	16.1%	47	17.9%	0.50, <i>ns</i>		
	elementary occupation	237	67.1%	169	64.5%			

of perceived distress (Range of potential scores from 0.01to 4). The Positive Symptom Total (PST) is defined as the number of symptoms to which the participant indicates a nonzero response (Range of potential scores from 1 to 90). This is a measure of the number of symptoms endorsed. Thus it can be interpreted as a measurement of symptoms span. The Positive Symptom Distress Index (PSDI) is calculated by dividing the sum of all item values by the PST; thus, this is a measure of "intensity" corrected for the number of symptoms (Range of potential scores from 1 to 4). This study used a Greek version of the SCL-90-R (Donias, Karastergiou, & Manos, 1991).

3. Number and type of losses (financial or personal) as a result of the fire. These included: a) damage to property (Yes vs. No); b) complete damage of property (Yes vs. No); c) personal injury or injury of a close family member (Yes vs. No); and d) deaths of close family members. (Yes vs. No). The responses

to questions a and b were mutually exclusive. (Thus if a person had complete damage to property this did not account also to damage to property). If more than one loss had occurred, all of them counted (number of losses).

#### **Procedure**

Data were collected in face-to-face interviews. The interviewers were twelve MSc students (qualified psychologists and social workers). They had previous training for the use of SCL-90-R under the supervision of one of us (V.P). The interviews started six months after the outbreak of the wildfires (March, 2008) and the duration of data collection was fourteen days. Households in designated disaster areas and in directly adjoining areas undamaged by fire were selected randomly from residency data provided by the surveyed municipalities. The total number of residents (18-65 years old) in the five prefectures was 247,559. The total number of residents in the areas that had been affected from the disaster

was 146,065 and the percentage of males to females was 51.8% / 48.2%. Interviewers asked if there was an adult in the household (at least 18 years of age) who would be willing to participate in a survey anonymously. In each household only one interview was conducted. When more than one person was available in a given household, the person whose demographic characteristics were most closely matched to representative regional census was selected for participation.

#### **Ethics**

The study had been approved by the Ministry of Health and informed consent was obtained from each participant. The purpose of this study was explained to the approached persons. All information was presented verbally and in writing. It was explained to the participants that the results would not be given to them. No inducement was given. No intervention or debriefing was given after the data collection. However, all were informed and were given contact numbers for the National Center for Social Solidarity where they could find help and psychological support if they felt that they needed it.

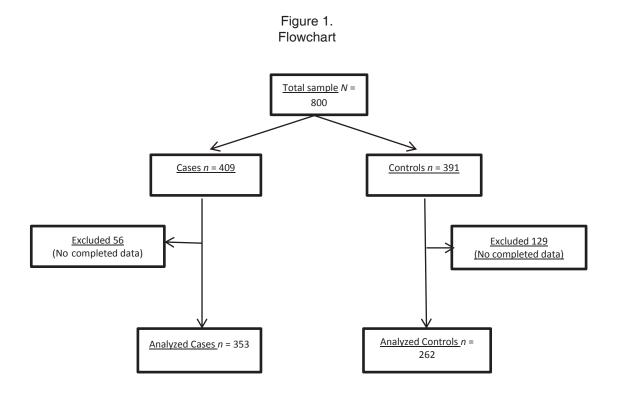
#### Statistical analysis

The data were analyzed with PASW (SPSS, ver. 18), using appropriate bivariate statistics. Q Local version 2.1.11 was used for the estimation of the standardized T scores from the raw data of the SCL-90-R scale. To estimate the parameter effects of losses and individual characteristics on the nine dimensions and the three indices of SCL-90-R scale a multivariate general linear model was constructed. Finally, in order to identify risk factors for psychiatric cases, a logistic regression analysis was performed.

#### **RESULTS**

#### **Demographics**

The initial sample consisted of 800 participants: 409 cases (exposed to the disaster) and 391 controls (reference group). Because of missing data, uncompleted questionnaires, and exclusion of individuals who gave the same response (0 or 4) on all items of the SCL-90-R, the final analyzed sample consisted of 615 participants (353 cases and 262 controls; see Figure 1). The two groups did not differ in demographic characteristics (See Table 1).



#### SCL-90-R

The two groups (exposed vs. control) were compared in terms of psychopathology as it was measured with the SCL-90-R (9 symptoms and 3 indices) using the *t*- test, and Cohen's *d* as effect size (Table 2). As it can be seen from the Table 2, those exposed to the disaster scored significantly higher in the symptoms of somatization, depression, anxiety, hostility, phobic anxiety, obsession, paranoia, and had significantly more symptoms (PST) and were more distressed by them (GSI) compared to the reference group.

#### **Caseness**

According to SCL-90-R (Derogatis, 1992) *caseness* is defined when a respondent has a GSI score greater or equal to a T score of 63, or if any of two dimensions scores are greater than or equal to a T score of 63. With this definition in mind, we further analyzed the data to identify cases and to compare the two samples. In the exposed sample, 154 individuals (43.6%) were identified as cases, whereas in the control sample the number was 78 (29.8%),  $\chi 2_{(1,N=615)} = 12.29$ , p < .001,  $\varphi = .14$ , QR = 1.83 (95% CI = 1.30 - 2.56), which indicates that the odds for identification as a case among the

Table 2.
Differences of Cases and Controls in the Nine Dimensions and the Three Global Indices
of SCL-90-R (t-tests)

			Mean	Std. Error	Effect size Cohen's	95% Confidence Interval of the Difference		
	t	df	p*	Difference	Difference	d	Lower	Upper
SOMATIZATION	2.96	613	.003	2.66	0.90	0.25	0.9	4.4
OBSESSIVE- COMPULSIVE (OC)	1.99	613	.048	1.79	0.90	0.17	0.0	3.6
INTERPESONAL SENSITIVITY (IS)	1.55	613	.121	1.28	0.83	0.13	-0.3	2.9
DEPRESSION	3.37	613	.001	2.90	0.86	0.29	1.2	4.6
ANXIETY	2.75	613	.006	2.43	0.88	0.24	0.7	4.2
HOSTILITY	2.37	613	.018	2.01	0.85	0.20	0.3	3.7
PHOBIC ANXIETY	3.35	613	.001	2.29	0.68	0.30	1.0	3.6
PARANOID	2.37	613	.018	2.16	0.91	0.20	0.4	3.9
PSYCHOTISM	1.85	613	.065	1.45	0.78	0.16	-0.1	3.0
GSI	2.55	613	.011	2.24	0.88	0.23	0.5	4.0
PSDI	-0.63	613	.529	-0.57	0.91	-0.05	-2.4	1.2
PST	3.11	613	.002	2.60	0.84	0.27	1.0	4.2

<sup>\*</sup>In **bold** the significant differences (p < .05)

exposed group was almost two times larger than the control group. Thirty-three (21.5%) of the identified cases among the exposed group had 2 psychological dimensions recorded and the rest of the identified cases among the exposed group (71.5%) had 3 or more dimensions meeting the criterion for identificationa as a case. Few (n = 11 [7.5%]) had all nine dimensions affected ( $T \text{ score } \ge 63$ ).

#### Number and type of losses

The participants who answered all of the questions dealing with the number and the type of loss were 609 (5 participants from the exposed group and 1 from the control group did not answer). Table 3 shows the number and the percentages of the individuals who had each type of loss (damages to property, complete damages to property, injuries of individual or close members of the family, and death(s) of close family member(s). The number of losses was determined by adding each category of loss: the minimum was 0 and the maximum 3. Note that the controls also had some losses, but those were unrelated to the disaster. Also there was no statistical difference between the exposed vs. controls on injuries. The differences occurred on damages to property, loss of property, and deaths of close relatives.

#### Risk factors for developing psychological symptoms

A multivariate general linear model was conducted to estimate the main effects of the disaster, the type of losses, and individual characteristics on psychological distress. In this model the 9 dimensions and the 3 global indices of the SCL-90-R were criterion variables and the types of losses (damages to property, complete damages to property, injury, death, four variables dummy coded), the number of losses, the variable (exposed or control), age, gender, education (three categories), occupation (three categories), and marital status (four categories) were predictor variables. As the occupation and the number of losses had no significant effect in the model, they were excluded from the final model. The final model was evaluated for the assumptions of normality, homogeneity of variance-covariance matrices, linearity and multi-collinearity using the Box's Test of Equality of Covariance Matrices, the Levene's Test of Equality of Error

Table 3.  Number and Type of Losses in the Exposed and Control Groups								
		Case	s (n = 348)	Contro	ols (n = 261)	Pearson X <sup>2</sup>		
		Count   Column n		Count Column n%				
damages to property	No	164	47.1%	245	93.9%	$\chi^2$ (1, N = 609) = 147.7, $p < .001$ , $\phi = .49$		
	Yes	184	52.9%	16	6.1%	Ι		
complete damages to property	No	282	81.0%	258	98.9%	$\chi^{2}$ (1, N = 609) = 47.1, $p < 0.001$ , $\phi = 0.28$		
property	Yes	66	19.0%	3	1.1%	.001, ψ .20		
injuries of individual or	No	331	95.1%	253	96.9%	$\chi^2$ (1, N = 609) = 1.25, ns		
close members of the family	Yes	17	4.9%	8	3.1%			
deaths of close members	No	305	87.6%	245	93.9%	$\chi^2$ (1, N = 609) = 6.6, $p$ =.01, $\phi$		
members	Yes	43	12.4%	16	6.1%	.10		
the number of losses	0	79	22.7%	219	83.9%	$\chi^2$ (3, N = 609) = 225.8, $p$ <		
	1	231	66.4%	41	15.7%	.001, φ = .60		
	2	35	10.1%	1	.4%			
	3	3	.9%	0	.0%			
				I.	I			

Variances and plots with satisfactory results. The simple Contrast Estimate was used to further investigate the "impact" of each level of the predictor variables on psychological symptoms. Table 4 shows only the significant main effects and the parameter estimates.

Parameter	B*	Std.	t	р	
Multivariate Analysis of	the Sam	ples (Expo	sed and 0	Controls)	
	Table	4.			

	Parameter	B*	Std.	t	p	95% Confidence Interval		
			Error		value	Lower Bound	Upper Bound	
SOMATIZATION	Exposed	2.79	1.07	2.61	.009	0.69	4.89	
	Female	2.19	0.86	2.55	.011	0.50	3.87	
	18-25	-10.17	1.78	-5.71	<.001	3.87	-6.67	
	26-35	-8.15	1.46	-5.57	<.001	-11.03	-5.28	
	36-45	-5.05	1.38	-3.65	<.001	-7.76	-2.33	
	46-55	-3.72	1.32	-2.82	.005	-6.31	-1.13	
	Primary school	3.66	1.54	2.37	.018	0.63	6.69	
	Complete damages to property	4.23	1.48	2.86	.004	1.32	7.15	
ОС	18-25	-6.14	1.94	-3.17	.002	-9.95	-2.33	
	26-35	-3.24	1.59	-2.03	.042	-6.37	-0.11	
	36-45	-3.20	1.51	-2.12	.034	-6.16	-0.24	
	Married	-6.35	2.86	-2.22	.027	-11.98	-0.73	
IS	Married	-6.31	2.63	-2.40	.017	-11.48	-1.14	
DEPRESSION	Exposed	2.52	1.08	2.34	.020	0.40	4.65	
22200.0	18-25	-5.13	1.80	-2.86	.004	-8.67	-1.60	
	26-35	-3.570	1.48	-2.42	.016	-6.47	-0.67	
	Primary school	6.10	1.56	3.92	<.001	3.04	9.16	
	Secondary school	3.30	1.34	2.46	.014	0.67	5.94	
	Married	-7.22	2.65	-2.72	.007	-12.43	-2.00	
ANXIETY	Exposed	2.37	1.14	2.08	.038	0.13	4.60	
ANAILTI	Primary school	3.61	1.64	2.20	.028	0.13	6.83	
HOSTILITY	Exposed	3.60	1.11	3.23	.001	1.41	5.78	
HOSTILITI	No damages to property	2.59	1.15	2.25	.025	0.33	4.85	
PHOBIC	Exposed	1.86	0.87	2.14	.032	0.16	3.57	
ANXIETY	Primary school	3.55	1.25	2.14	.005	1.09	6.01	
ANAIETT	Married	-5.23	2.13	-2.45	.005	-9.42	-1.05	
PARANOID				2.16		0.23		
PARANOID	Exposed	2.55	1.18	1	.031		4.87	
	Married	-8.52	2.90	-2.94	.003	-14.21	-2.83	
DOVOLIOTION	Deaths	3.82	1.52	2.51	.012	0.83-	6.81	
PSYCHOTISM	Female	1.79	0.80	2.25	.025	0.23-	3.36	
	56-65	3.50	1.66	2.11	.035	0.25	6.76	
001	Married	-7.93	2.45	-3.24	.001	-12.74	-3.12	
GSI	Exposed	2.55	1.12	2.28	.023	0.35	4.76	
	18-25	-6.09	1.86	-3.27	.001	-9.76	-2.43	
	26-35	-4.02	1.53	-2.62	.009	-7.02	-1.01	
	36-45	-3.53	1.45	-2.44	.015	-6.37	-0.68	
	Married	-6.10	2.75	-2.22	.027	-11.50	-0.69	
PSDI	18-25	-6.48	1.98	-3.28	.001	-10.37	-2.60	
	Primary school	-3.38	1.71	-1.97	.049	-6.74	-0.02	
	Secondary school	-3.69	1.48	-2.50	.013	-6.59	-0.79	
PST	Exposed	2.64	1.05	2.51	.012	0.58	4.71	
	18-25	-4.94	1.75	-2.83	.005	-8.38	-1.51	
	26-35	-3.59	1.44	-2.50	.013	-6.41	-0.77	
	36-45	-3.20	1.36	-2.36	.019	-5.87	-0.53	
	Primary school	4.28	1.52	2.82	.005	1.30	7.26	
	Married	-7.04	2.58	-2.73	.007	-12.12	-1.97	

<sup>\*</sup>The signs in the estimates column indicate the direction of the relationship, i.e., the (-) means that this variable contributes negatively (e.g., married are less likely to have OC symptoms compared to single, divorced and widowed)

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As in the bivariate analysis, in this model those exposed to the disaster showed similarly increased symptoms of somatization, depression, anxiety, hostility, phobic anxiety, paranoia, and had increased indices of PST and GSI (greater number of symptoms and more distress). Those who completely lost their property had increased levels of somatization, while those who had lost a close relative had increased levels of paranoia across the groups. In addition, those exposed who did not face damages to property showed increased levels of hostility compared to those who had damages to their property with the other variables being controlled. Personal injury or the injury of a close relative did not have any significant influence on psychological symptoms or on levels of psychological distress. Apart from the potential impact of wildfire disaster on the psychopathology of the participants, Table 4 shows that some demographic characteristics also had a significant influence in psychological distress. Women, older individuals (56-65 years old in comparison to younger groups), and individuals with a lower education in comparison to both secondary and college were more prone to report somatization symptoms when exposed to the disaster. Similarly, older age (56-65) and unmarried individuals (those single, or divorcee, or widowed) demonstrated a significantly higher risk of having Obsessive Compulsive (OC) symptoms irrespective of whether they had been exposed to the disaster or not, or whether they had any loss or damage from the disaster. Marriage had a protective effect on interpersonal sensitivity for all the participants case and controls. In addition, depressive symptoms were significantly more often present among those exposed to the disaster (cases), those with lower education, those unmarried, and those in older age (56-65 years old). Anxiety and phobicanxiety symptoms were present more often in those who were primary school graduates and the unmarried. Symptoms of paranoia were more often present among those exposed to the disaster, those who experienced the death of close relatives, and in those unmarried; while psychotism was more often present among women, older people (56-65 years old) and unmarried individuals. With regard to the 3 global indices, Table 4 shows that older (56-65 years old), unmarried (single, or divorcee, or widowed), and those exposed to disaster had a higher intensity of perceived distress. Similarly, those exposed to the disaster (cases), those with lower education, those older, and those unmarried had a broader range of symptoms (PST). Finally, those of older age (56-65 years old) and higher education reported an increased intensity of symptoms as measured by the PSD Index regardless of whether or not they were cases or controls.

#### Risk factors for identification as a case

Finally, to identify the risk factors for inclusion as a case in this study, as it is defined by the SCL-90-R, a binary logistic regression analysis was performed. Predictor variables included the demographic characteristics (gender, age group. education, marital status, occupation), membership in either the case (exposed) group or the control group, the number of losses, and the type of losses (damage of property, complete damages to property, injury to self and others, deaths). The criterion variable was whether or not they were possible psychiatric cases as defined above. The final model is presented in Table 5. Risk factors for someone to be identified within the case group were exposure to the wildfires, to be primary school graduates (education), and to be widowed (marital status).

#### DISCUSSION

The results show that those exposed to the wildfire disaster had a higher level of psychopathology compared to controls. Similarly, they had a higher percentage of potential psychiatric cases, compared to controls. However, both controls and exposed groups had a higher prevalence of psychopathology in relation to the general population as estimated in Greece. An epidemiological study in Greece reported the prevalence of psychiatric disorders around 16% (Mavreas, Beis, Mouyias, Rigoni, & Lyketsos, 1986), while another reported approximately 14% (Madianos, Tomaras, Kapsali, Vaidakis, Vlachonicolis, & Stefanis 1988). A third study, this one in primary health care, reported a prevalence of 19.2% (Goldberg & Lecrubier, 1995). However, these three studies were carried out in an urban region (Athens) and the reported prevalence is possibly different from that of rural areas, the area of this study. But even in the case that the three above reported studies underestimate the general prevalence (as they focused on major disorders), the prevalence of cases (30%) in the control group of this study may be high. There are three possible explanations for this finding. A first explanation is that, perhaps, this is the true prevalence for this rural area given that SCL-90-R can also detect "minor psychiatric disorders" (Derogatis, 1992). A second explanation may be that not all the cases, which the SCL-90-R indicates as within the definition of caseness, are true psychiatric cases, and because there was no further

Table 5.
Regression Analysis: Independent Risk Factors for Caseness in the Entire Sample.

Variables	B*	Std.	Wald	df	<i>p</i> value	Odds	95% C.	l. for <i>OR</i>
		Error				Ratio	Lower	Upper
Exposed	0.78	.202	14.66	1	<.0001	2.17	1.46	3.23
Education			10.15	2	.006			
Primary school	0.91	.325	7.91	1	.005	2.49	1.32	4.71
Secondary school	0.40	.298	1.78	1	.183	1.49	0.83	2.66
Marital status			41.92	3	<.0001			
Married	-1.12	.492	5.21	1	.022	0.32	0.12	0.85
Single	-0.87	.522	2.78	1	.095	0.41	0.15	1.16
Divorced	0.85	.943	.81	1	.368	2.34	0.37	14.85
Damage to property	0.36	.208	2.99	1	.084	1.43	0.95	2.16

<sup>\*</sup> The signs in the estimates column indicate the direction of the relationship, i.e. the (-) means that this variable contributes negatively (e.g., married are less likely to become psychiatric cases compared to single, divorced and widowed)

psychiatric evaluation perhaps there are many false positives. Psychiatric diagnosis requires a clinical interview, whereas a questionnaire can only provide a probable diagnosis. A third explanation, and perhaps a more plausible one, is that the control group may have also been psychologically affected by the disaster. Given that they lived nearby (although unaffected by the wildfires) and given the insecurity they experienced at that time (if the wildfires would expand to their area or not), plus the intensive and lengthy everyday broadcasting of news and reports from the national and international media about the disaster that lasted for months, it is unlikely, at least for those more vulnerable, for them to be psychologically unattached (Ahern et al., 2002; Eth, 2002; McFarlane, 1989). Nevertheless, if any of the last two explanations is true, this could affect both populations in the same direction and since this study looked for differences between them those differences probably stayed the same.

This study identified 43.6% as potential psychiatric cases. A similar study by McFarlane and colleagues (1997) reported a similar rate, 42%, among those exposed to wildfires disaster twelve months after the Ash Wednesday bushfires in Australia in 1983. The authors identified the potential psychiatric cases using the General Health Questionnaire (GHQ). Furthermore, comorbidity was a general

characteristic in cases in the present study. The vast majority (71.5%) of those identified as cases in the current study had three or more symptom dimensions affected. Psychological comorbidity is one of the most common findings in disaster literature rather than an exception (Den Ouden, van der Velden, Grievink, Morren, Dirkzwager, & Yzermans 2007; Hussain, Weisaeth, & Heir, 2010; Yzermans, Donker, Kerssens, Dirkzwager, Soeteman, & ten Veen 2005).

This study also found that those exposed to the disaster showed increased symptoms of somatization, depression, anxiety, hostility, phobic anxiety, paranoia, and had a greater number of symptoms and were more distressed compared to controls. These results are comparable to those of other studies which evaluated psychopathology after a disaster (e.g., Heir, Piatigorsky, & Weisaeth, 2010; Heir & Weisaeth, 2008; Norris, Friedman, Watson et al., 2002; Yzermans et al., 2005). As it was also reported in the introduction of this paper, these symptoms are common in many types of disasters. Regarding wildfires specifically, Marshall and colleagues (2007) found that 33% of individuals seeking assistance after the California wildfires in 2003 showed evidence of major depression. Similarly, greater levels of psychopathology and higher percentages of depression among the victim residents of a city in Southern California after a wildfire were reported (Jones, Ribbe, Cunningham, & Weddle, 2003). Somatization symptoms have also been reported after disasters (van den Berg et al., 2005). In the aftermaths of the 1983 South Australian Ash Wednesday Bushfires a significant increase in somatization in the victims of the disaster was reported, while the prevalence of non-stress related conditions, such as cancer or urological disease, was not significantly increased (Clayer, Bookless-Pratz, & Harris, 1985). Comparable results were reported by Maida and colleagues (1989) in a small sample of victims of a fire in the Baldwin Hills community of Los Angeles. It has been suggested that the SCL-90-R may overestimate somatization or fail to distinguish between depression symptoms and somatization (North, 2002), but studies using other scales such as GHQ or the Diagnostic Interview Schedule (DIS) reported similar results (Solomon, Smith, Lee Robins, & Fischbach, 1987). In addition, depression and somatization can co-occur in different times of the lifespan (Lieb, Meinlschmidt, & Araya, 2007).

This study also examined risk factors for the development of each psychological symptom. Demographic factors such as marital status, age, gender, and education are independent risk factors for the development of psychological symptoms in those exposed to the disaster. More specifically, marriage appeared to play a protective role in the development of any symptom. Similarly, youth appeared to have had a protective effect, while older people appeared to be more prone to develop somatization and depression. Gender was found not to be related to identification as a case, but women were more likely to develop somatization symptoms. There is an ongoing debate in the literature about the factor of gender (Norris, Friedman, Watson et al., 2002). A number of studies have reported no gender differences (e.g., Den Ouden et al., 2007; Ginexi, Weihs, Simmens, & Hoyt, 2000) while others have reported that women are more likely to develop depression or phobia (Anderson & Manuel, 1994; Heir & Weisaeth, 2008; Hussain et al., 2010). However, in our study we looked separately at every symptom dimension and overall global functioning. In the present study it was found that women were more prone to develop somatization. Although it is difficult to do a direct comparison with other studies because of different methodologies, there have been other studies which reported similar results. For instance McFarlane and colleagues (1997) found that women had a higher risk to develop somatization compared to men after the Australian bushfires. Similar results were reported after the 1992 earthquake in Turkey (Karanci & Rustemli, 1995), after the southern California wildfires in 2003 (Scher & Ellwanger, 2009), and after a series of disasters (storm, tornado, floods, exposure to dioxin) in the St. Louis, Missouri area in 1982 (Solomon et al., 1987). It was proposed (van den Berg et al., 2005) that the female gender is perhaps a risk factor for somatization in general populations even before disasters occur and perhaps the disaster simply magnifies this risk. However, Solomon and colleagues (1987), after analyzing pre- and post-disaster data, reported that women are at higher risk for somatization after disaster and that those with very strong social ties and thus more demands are at the highest risk compared to those with few social ties.

Furthermore, we found in our study that a higher level education appeared to have a protective effect on the development of psychopathology in victims, while those of lower levels of education are more likely to demonstrate somatization, depression, anxiety and phobic anxiety and they are more likely to be psychiatric cases. Similar results were reported in other natural disaster studies (e.g., Irmansyah, Dharmono, Maramis, & Minas, 2010). It has been suggested that the underlying mechanism of this association is that people with lower education perhaps have lower resiliency, lower self-esteem, lesser coping skills, and lower adaptability, resulting in more difficulties in recovery from the disaster (Wang et al., 2009). However, the study found that those of older age (56-65 years old) and higher education reported an increased intensity of symptoms irrespective of whether or not they were cases or controls. This, perhaps, is due to the fact that older, more educated people are expected to offer more in their communities; they seen as the "leaders," and their responsibilities are increased towards their community. Perhaps their symptoms are more intense as a result of their increased responsibilities.

Regarding the losses, those who completely lost their property were more likely to develop somatization problems. A literature review of somatization in communities affected by disaster identified severe loss of property as a consistent risk factor for somatization across studies which examined psychopathology after disasters (Van den Berg et al., 2005). A rather surprising finding was that those who did not suffer damages were more likely to be hostile. Hostility is a common symptom in victims of disasters (Den Ouden et al., 2007; Lopez-Ibor, 2006). During the post-disaster period it has been observed that feelings of rage and hostility appear towards those responsible but also against the society in which the disaster took place and against the government and the leaders (Lopez-Ibor, 2006). A possible explanation is that those with losses had already received, by the time this study was carried out, both financial and social support. The fact that those with losses were in priority to receive most of the support may have increased their resilience, leaving those without damage still hostile. An alternative suggestion is that those with damages and losses were more occupied with the adjustment to the new situation and rebuilding of their property and this could be a distraction for them. Both of these explanations are speculative. To our knowledge this is a new finding and possibly needs further investigation.

In addition, those with deaths of close relatives were more likely to develop paranoid ideation. Paranoia has often been reported after disaster either as symptom or as part of the overall PTS disorder (e.g., Burkle, 1996; Whaley, 2009). Although no specific study has investigated the relation of paranoia and death of a close member in disasters, it has been speculated that the more intense the trauma and more incidences of trauma, the greater the mistrust and paranoia (Beltran, Llewellyn, & Silove, 2010). People react differently during bereavement, but the increase of paranoia remains unexplained by our data. Perhaps this is a cultural phenomenon, but it is worth noting here that even though the relationship is statistically significant it is weak because the confidence interval (CI) is quite wide (from 0.83 to 6.8). Thus, the power (alpha = 0.36) to detect true difference is low regarding deaths despite the large sample. Another important finding was that personal injury or injury of a close relative did not appear to have an effect on psychopathology. Injury to oneself or a family member is generally thought to be a risk factor for adverse psychological outcomes (Norris, Friedman, Watson et al., 2002). However, similar findings have also been reported by Clayer, Bookless-Pratz, and Harris (1985), McFarlane (1989), and Heir and Weisaeth (2008). Heir and Weisaeth (2008) pointed out that having a near relative or close friend injured could be a protective factor because of the distraction it provides, and because a caretaking role for a close relative may increase resilience and self-efficacy.

#### Limitations of the study

This was a cross-sectional study. We did not have prior data to follow the sequel of the psychological "impact." Because of this design we cannot be assured of drawing conclusions about cause- effects. Another limitation of this study is that we have relied on one self-report instrument to measure the psychological symptoms and we did not collect data from observers or qualitative data from the researchers and we did not have further evaluation of cases from psychiatrists. On

the other hand, the methodological strengths of our study are that the sample was large, we used a well-matched control sample, we used data directly from fieldwork, and we did not use surrogate markers.

#### Implications of the study

As far as we know, this study is the first of its kind in the Greek population and among few which examine the psychological consequences of a wildfire disaster. The psychological consequences of wildfire disasters are comparable to other manmade or natural disasters. Indeed, wildfire disasters can be a hybrid of manmade and natural disasters because wildfires can start from human errors or from arsonists. Even in the case that wildfire is a natural disaster, rumors and speculations that the fire is the result of arsonists could exist. This also happened at the beginning of the wildfires in Greece, where broadcast and printed media, as well as rumors in the community, speculated that the wildfires were due to arsonists. This may well have increased paranoia, mistrust, anger, and hostility. Given that more and more people are making their homes in woodland settings, in or near forests, and in rural and remote areas, the risks of wildfires and their consequences on human life and distress are increased. (Jones et al., 2003; Ryan & Wamsley, 2008). The recent fire history indicates that since the 1960s there has been a general increase in the number of wildfires in the Mediterranean area and it has been predicted that even more significant wildfire events will occur in the next years (consider also the recent wildfires in Israel; Wittenberg & Malkinson, 2009). Thus, communities need to be prepared to prevent wildfires but also to treat those affected when a disaster happens. This paper provided evidence-based reasons for public health policy makers to create services in order to help improve the mental health of those affected. Individuals who were not only present during the wildfire, but also lost their properties showed elevated levels of psychological symptoms. In addition, this work suggests that not only those directly affected by the wildfires are at risk for mental health problems, but this also holds for populations and communities which were not directly affected. Moreover, individuals with paranoia, somatization symptoms, or severe distress are less likely to visit mental health teams. Previous research on mental health service utilization has shown that the use of mental health services is less than actually needed by survivors of a disaster (Rodriguez & Kohn, 2008). Thus, identification of cases could not rely only on self-referral or on visits to the affected areas. The establishment of assertive mental health teams is perhaps a more effective solution in identifying and treating those in need.

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## Mental Health Screening at Temporary Military Health Clinics in Low Income Hispanic Communities within the Rio Grande Valley of Texas

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Abstract: Behavioral and mental health problems are not always considered in temporary medical clinics nor are instruments readily available to provide medical practitioners in these settings with information relevant to mental health conditions. This study provided preliminary data on the utility of the Mini Mental Screen in temporary military medical clinics in the Texas Rio Grande Valley. This instrument was administered to individuals who may have behavioral or mental health problems. In a sample of mostly Hispanic patients (N = 75) seen at a temporary medical clinic, 12% were at significant risk of mental health problems, with an additional 9% at moderate risk using published cut-off scores for the risk of such problems. The results for each patient were provided to a medical practitioner who further evaluated the risk, treated the problem, or made a referral. When asked, three of four medical practitioners found that screening data was helpful in their work with patients. One practitioner was concerned that the screening instrument might have too high a false positive rate to be useful. Cultural issues of openness about mental health and behavioral problems need to be considered in such settings. [International Journal of Emergency Mental Health, 2011, 13(1), pp. 27-30].

Key words: disaster assessment; mental health screening; behavioral health management; multicultural psychology

#### INTRODUCTION

For two weeks each year in the Texas Rio Grande Valley, Texas Military Forces provide free medical clinics and other

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health related services on a walk-in basis in eight locations for all who arrive. The annual disaster training exercise is designated as Operation Lone Star (OLS). Texas Military Forces provide these services in conjunction with the Texas Department of State Health Services and local county health services. OLS is also a training mission for Texas Military Forces, as it provides training in the organization and operation of medical clinics after disaster situations such as hurricanes. This is one of the primary mandates for the Texas State Guard, which is one of the three branches of the Texas Military Forces.

Operation Lone Star medical clinics have not always provided behavioral health or mental health services and the actual need for such services in these clinics is not well understood. Before 2010, mental health services were sometimes available at OLS on a referral basis from clinic physicians and were occasionally used. At OLS in 2008, statistics were collected that suggested that mental health services were warranted and should be regularly provided as part of the general medical services offered at Operation Lone Star. At OLS in 2010, a convenience sample of clinic patients was screened using the Modified Mini Screen (MMS) developed by the New York State Office of Alcoholism and Substance Abuse Services (2001). This was a follow up to the work done in 2008, with the aim of improving the quality of health services at OLS by providing mental health information to the medical provider. Also, it was done to determine whether or not mental health screening and mental health services should be provided at OLS as a regular part of these clinics.

#### **METHOD**

#### **Subjects**

All adults who arrived one afternoon and those arriving the following morning were selected and were asked to answer the MMS items while they waited to see a physician or nurse practitioner regarding their presenting medical problems. All patients were told the results of the screen would be provided to the medical practitioner so the patient could then be provided with the best medical care during their visit. All but two persons completed the questionnaires and returned them to the examiner (N=75). Sixty-eight of the 75 patients decided to complete the Spanish version of the MMS, supporting the conclusion that most patients were Hispanic. The screens were scored and the results were placed with the patient's medical chart generated at the clinic.

#### **Materials**

The MMS is a 22-item pencil and paper instrument that takes about 15 minutes to answer and which screens for mental health problems in three areas: mood disorders, anxiety disorders, and psychotic disorders. The MMS is brief and is available in two languages, English and Spanish. The items are based in a straightforward manner on DSM-IV-TR diagnoses. Many patients at OLS clinics speak little or no English, and having an instrument that was available in both languages was an advantage of the MMS.

The MMS was originally validated using 383 adults in 17 different inpatient and outpatient settings by the Nathan

Kline Institute Center for the Study of Public Mental Health (in Spotts, 2008, p.31). Spotts compared the MMS to the Brief Symptom Inventory (Deragotis, 1992) and found modest concurrent validity between the two instruments using 130 Iowa prisoners. She found a 47% sensitivity of the MMS for males and a sensitivity of 88% for females. Specificity for the two groups was 96% and 100%, respectively. Other researchers (Alexander, Haugland, Lin, Bertollo, & McCorry, 2008) administered the MMS to 476 subjects in substance abuse, correctional, and social service settings and found that, with cut off scores of 6-9, the MMS's sensitivity ranged from 0.63 to 0.82 with a specificity of 0.61 to 0.83, yielding an overall accuracy of classification between 70 and 75 percent when compared against the Structured Clinical Interview for DSM-IV (American Psychiatric Association, 2000). The MMS was useful for both Caucasians and African-Americans, according to their study.

The MMS was scored according to the guidelines in the manual. The manual recommends that persons receiving 6 to 9 points be considered as having a moderate likelihood of having a mental illness and that persons receiving a score of 10 points or higher be considered as having a high likelihood of having a mental illness. Item 4 was inspected since it indicates the possibility of suicide. Items 14 and 15 were inspected together for the presence of postraumatic stress disorder. Since the wording of many items is based straightforwardly on DSM-IV-TR diagnostic criteria, the examiner occasionally suggested additional diagnoses to the medical clinician on a rule out basis.

There were four physicians or nurse practitioners who saw patients in the clinic after screenings were performed for various physical medical conditions. Results of the MMS were provided to these medical practitioners as part of the patient's chart.

#### **RESULTS**

Patients returned 77 MMS forms. Two were discarded when the patients declined to complete them. Of the remaining 75 completed forms, 9 (12% of the total) had scores of 10 or greater, suggesting the patient was at high risk for a mental illness. Seven had scores between 6 and 9 (9.3% of the total), suggesting a moderate risk that the patient suffered from a mental illness. Of the 59 protocols in the low risk category, one scored positive on suicide risk, and five more appeared worthy of follow up assessment because of

item endorsement. This was because these items suggested the presence of mood disorders, panic attacks, or psychotic features for these patients. On 10 (13.3%) of the protocols, patients endorsed item 4 (In the past month, did you ever think that you would be better off dead, or wish that you were dead?), suggesting a possible suicide risk. Altogether, 22 protocols were identified as either elevated or risky, suggesting that 29.3% of the total should receive a further mental health assessment.

#### DISCUSSION

Just prior to the patient's visit to the medical clinician, the results of the each patient's MMS protocol were provided for inclusion in the diagnostic interview. The screener provided an English translation of the protocol along with mental health diagnoses for the medical clinician to consider and rule out.

At the conclusion of the study, the four medical practitioners in the clinic were interviewed regarding the utility of the MMS as a screening instrument for use during OLS. One clinician found the hypotheses generated very useful and firmly endorsed its use. Two others were positive about its usefulness. Further, one of these clinicians approached the screener during the study and asked that an adolescent be given the instrument, despite the lack of normative data for adolescents, thus showing further confidence in this type of screening. The remaining clinician stated that the instrument generated many false positives and that patients routinely denied items that they had just previously endorsed.

Given the opinion of the screening held by this last clinician, the screener later discovered this clinician was seeing more than twice as many patients per treatment day as other clinicians, and thus may have not built the rapport necessary for full disclosure of mental health issues. A Hispanic health provider who was on site provided additional insight, indicating that Hispanics, especially men, are often unwilling to discuss mental health issues with health providers. This suggested the need for greater patience and cultural sensitivity by clinicians when interviewing for mental health problems in this population.

Results of the MMS screening procedure were shared with Brian R. Smith, M.D., M.P.H., who was both the Incident Commander of OLS and the local Public Health Authority. Based on the procedure used and the results obtained, Dr. Smith expressed a clear desire that mental health screening be continued as part of Operation Lone Star in future years, either using the MMS or similar mental health instrument. Further, he stated that mental health personnel should be provided for follow-up interviews to the screenings as an adjunct to medical clinicians (Morecook, Greenstone, & Smith, personal communication, July 29, 2010).

#### CONCLUSION

The MMS was a useful instrument in screening for mental health problems in this temporary community military medical clinic. The MMS or similar instrument should be used for screenings, and mental health professionals should be provided to perform follow-up mental health assessment and referral. Mental health evaluators should take time and care to create a positive rapport as part of the clinical interview in order to increase the likelihood of full disclosure of mental health issues.

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### Police Organizational Stress: The Impact of Negative Discipline

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Abstract: Previous work has suggested that the police organization is considered a difficult work stressor by officers. Of stress factors stemming from the police organization, excessive or unfair discipline rates high among rank and file officers. The police organization may be considered a punishment centered bureaucracy, where emphasis is placed on what is wrong and not on proper or laudatory behavior. Although discipline is essential in critical occupations such as police work, it is important that such discipline be properly administered in order to avoid stress and feelings of organizational abandonment. This paper provides a general overview of present police organizational discipline prescriptions, and an example of an alternative positive-based discipline program. [International Journal of Emergency Mental Health, 2011, 13(1), pp. 31-36].

Key words: Police discipline, stress, organization

#### INTRODUCTION

"Officers are led to the muddy waters of punitive discipline and made to drink, and then they get sick. Some are sick for the moment, and for some it takes a lifetime to cure." (Baca, 2008).

Our previous work has suggested that the police organization is not only considered a difficult work stressor by officers, but that it also does not provide the support necessary for officers to deal with the stress of police work (Paton, Violanti, Johnston, Burke, Clarke & Keenan, 2008). Of stress

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factors stemming from the police organization, excessive or unfair discipline rates high among rank and file officers. The majority of studies conducted on discipline suggest that police organizational discipline has a negative impact on the officer's work life. Most police departments tend to be designed along bureaucratic lines (Manning, 1977). As such, the police organization may be characterized as a punishment centered bureaucracy, basing its interaction with members in terms of emphasizing what is wrong (Violanti, 1981).

The overall objectives of a disciplinary system are to facilitate the orderly functioning and operation of the police organization; to ensure employee adherence to reasonable and acceptable standards of performance and conduct; and to provide fair and equitable consequences for failing to adhere to those standards. Unfortunately, punishment-centered disciplinary strategies seldom accomplish these goals (Denver discipline handbook, 2008). Violanti and Aron (1994) found that excessive discipline, as well as other organizational support factors, scored high among police officers on the list of stressors at work (Table 1).

Table 1. Police Organizational Stressors *								
Stressor	Mean	SD						
Inadequate dept. support	60.93	29.24						
Excessive discipline	53.27	28.81						
Inadequate support (super.)	52.43	30.47						
Inadequate equipment	52.36	27.61						
Job conflict w/rules	50.64	26.82						
Lack of recognition	48.10	29.03						
Getting along w/supervisors	44.48	30.76						
Disagreeable regulations	42.27	28.20						
Inadequate supervision	40.11	29.54						
Lack of participation-decisions	31.10	24.46						

\* Scores ranked from 0-100

Violanti, J. M., & Aron, F. Ranking police stressors. Psychological Reports, 1994,75,824-826. ©Psychological Reports 1994. Reprinted with permission.

Organizational actions are a source of stress for police officers because they perceive them as oppressive and beyond their control. Officers often comment that the police administration is separated from the daily routine of police work, while at the same time administering punishment for minor rule infractions. Officers also comment that they are more often cited for negative actions and not good for work (Karasek, 1979). Police officers look at Internal Investigation (IA) officers as representatives of management (Reuss-Ianni, 1984). As such, they breach the solidarity expected among all police officers. A sense of organizational betrayal sets in when officers perceive support to be non-existent, undermining feelings of control and commitment to the organization (Ruess-Ianni, 1984; Wechter, 2004).

Organizational support positively influences performance when the agency's formal and informal policies reflect concern for the officer as a valuable member. When officers perceive a lack of supervisory support, particularly when the

agency's management philosophy is autocratic and negative, there are increased feelings of suspicion toward supervisors and decreased performance (Taylor & Benell 2006). This is especially true during the disciplinary process, when a disciplinary decision is made based on other than the facts of the matter (Hickman, Piquero & Greene, 2000; Rampart Independent Review Panel, 2000).

Departmental personnel who are negatively disciplined often develop a sense of organizational unfairness. Unfortunately, such feelings may last an entire career in some officers. Organizational justice may potentially explain many organizational behavior outcomes (Greenberg, 1990). Specifically, organizational justice is concerned with the ways in which employees determine if they have been treated fairly in their jobs and the ways in which those determinations influence other work-related variables. In essence, organizational justice proponents state that if employees believe they are treated fairly, they will be more likely to hold positive attitudes about their work, their work outcomes, and their supervisors (Greenberg, 1990).

Lack of uniformity in the application of discipline is another problem mentioned by police officers (Rampart Independent Review Panel, 2000). There is little uniformity in disciplinary procedures in United States police departments except in the kinds of disciplinary sanctions imposed on delinguent officers. Prompt and fair disposition of complaints against officers is essential not only to good discipline and police morale, but also to the maintenance of the respect and confidence of the public (Dempsey, 1972). The perception of inconsistency arises from two different factors. In some instances, there is the perception that certain officers are treated more favorably than others. In some other instances, the perceived inconsistency is a result of different standards on the part of command officers responsible for discipline. Some supervisors are seen as very tough on misconduct, or particular kinds of misconduct, while others are more lenient (Walker, 2003).

#### **Characteristics Of Police Discipline**

In earlier times, many organizations adopted a "Scientific Management" approach to discipline first developed by Frederick Taylor (1911). Police organizations followed suit, based on a rigid quasi-military structure. Taylor believed the worker was worthy of hire, and pay was linked to productivity. The methods Taylor adopted were directed solely towards

the uneducated: "When he tells you to pick up and walk, you pick it up and walk, and when he tells you to sit down and rest, you sit down. You do that right through the day. And what's more, no back talk" (Taylor, 1911). It is only through enforced standardization of methods, enforced adoption of the best implements and working conditions, and enforced cooperation that this faster work can be assured. And the duty of enforcing the adoption of standards and enforcing this cooperation rests with management alone (Taylor, 1911).

Times have changed since Taylor's management ideology; however, the police organization has fallen behind in terms of discipline. The term "discipline" has several different dimensions. Most importantly, it means more than just punishment. Punishment has the general purpose of penalizing an officer for misconduct, and also to deter future misconduct, both by the officer in question and other officers. A system of discipline should instead include practices designed to correct officer performance. These practices include coaching, advising, and teaching – actions that are not considered "discipline" in a traditional sense (Bender, Jurkanin, Sergevnin & Dowling 2005). These actions are appropriate for less than satisfactory performance that does not rise to the level of formal misconduct. Ideally, these actions will reduce or eliminate performance problems that might eventually require formal discipline.

In the traditional system of police discipline, initial offenses are responded to with punitive actions; the officer is punished for his/her incorrect behavior. The second form of discipline is usually identified as positive or affirmative discipline (Bender et al, 2005; Iannone, 2001).

Bender and colleagues (2005, p.8) outline features of negative discipline:

- The negative discipline systems have progressively more punitive steps and apply more severe penalties for each subsequent violation of the rules and regulations of the department.
- The purpose of increasing the penalty for each subsequent violation is to give the officer an opportunity to correct the errant behavior before the ultimate penalty of discharge.
- Critics of this approach note that the traditional system of punishment is illogical: that an employee will get progressively better by being treated progressively worse

The biggest criticism of the traditional approach to discipline is that it is reactive. If it is the only approach used by leadership, it places command in a "wait until the next problem occurs" position. The traditional approach does not involve taking positive, proactive steps to encourage employee growth, learning and development. For many leaders this is a significant limitation.

### An Example Of A Positive Police Discipline **Program**

Bender and colleagues (2005, p.9) also outline features of a positive approach to discipline:

- Positive discipline has been described as involving building and teaching. In this view the philosophy is that good discipline encourages self-control.
- Positive discipline is built on the belief that officers can be taught through conscious and positive actions of the supervisor to affirm the need to accept and conform to the departmental standards of conduct, rules, and regulations.
- Positive discipline principles and methods are nonpunitive and at the same time non-permissive. Positive discipline is a form of training and attitudinal conditioning, which is used to correct deficiencies without invoking punishment.
- Positive discipline takes the form of affirmative action steps and attempts to treat problem employees positively, rather than in a negative or punitive fashion. A key part of positive discipline is the commitment to self-discipline.
- Self-discipline is a set of self-imposed rules governing a person's conduct in relation to the awareness of what is expected on the job. Officers should be pulled towards change, not pushed.
- Positive approaches to discipline and generally creating a positive atmosphere in an agency will generate self-discipline in the officers. Praising officers, for example, for trying, instead of "putting them down" for doing it wrong will more often make officers want to do it right.

In consideration of a more positive discipline approach. Sheriff Lee Baca (2008) of the Los Angeles Sheriff's Department launched a project to create an alternative to the traditional disciplinary system that relies in large part on punishment. According the Sherriff Baca, Officers must know that, when they engage in misconduct, they will receive fair and appropriate discipline commensurate with the level of misconduct. To do otherwise will have negative consequences for both the individual officer and the police organization. An effective disciplinary system is one that is fairly administered, consistent, based upon department-wide standards, and designed to ensure timely results.

The new system was called "Education Based Discipline" (EBD). The concept is rooted in the belief that the traditional "days off" discipline may unfairly burden an employee's family and is too mechanical, in that it does not require the department to engage with the employee in a way that will remediate the employee and reduce the likelihood of future policy violations. Under the new plan, disciplined employees will have a choice between taking days off or completing an education-based plan, where the member may take classes, conduct briefings, and/or write letters of apology as a way of compensating for violations of policy and improving future behavior. The goal of Education Based Discipline is to regularize disciplinary practice by providing concrete options from which all supervisors can choose to create an individual remedial plan. In addition, all department members who opt for EBD will attend a "LIFE" class (Lieutenants Interactive Forum for Education), facilitated by a cadre of lieutenants and intended to provide a refresher to employees on leadership and core ethical values of the organization.

The EBD program rests on a strong theoretical foundation. If the goal of discipline is to maintain adherence to regulations and the proper application of policing in society, then education is the proper tool to shape behaviors to increase awareness and competence in choosing the most appropriate course of action. Educational techniques in lieu of punishment can increase officer motivation and performance. Self efficacy, established by learning, plays an influential role in shaping behaviors in two ways: (1) belief in one's capability to cope with the challenges in police work, and (2) belief in personal efficacy to regulate one's own motivation and behavior through education, officers can become more aware of a behavioral problem and consider changing the behavior. Education will also help the officer to engage with plans to change behavior and take actions to change behavior. Lastly, education helps to stabilize behavior change (Bandura, 1988).

Unlike punishment-based procedures, the EBD system has the potential to increase compliance with organization policies, establish feelings of being respected among police officers who become engaged in the disciplinary system, and increase overall organizational commitment. These factors result in improved police compliance and performance.

#### The Basis of EBD (EBD Manual, LSAD, 2008)

EBD relates violations of policy to relevant behavioral descriptions. All violations of policy relate to one or more of these six behavioral descriptions.

- Problem Solving and Self-Management
- Skill Enhancement
- Boundary Recognition
- Substance Misuse/Abuse Awareness
- Character Reinforcement
- Mitigating and Aggravating Factors

EBD is completed on-duty. There are six "menus" which provide recommended classes and /or independent study options.

- LIFE Class The LIFE (Lieutenants Interactive Forum for Education) decision-making class is the foundational course for EBD. Each and every employee, who participates in EBD, regardless of the number of suspension days, shall attend the eight hour LIFE class as a component of EBD.
- EBD Education Credits Each suspension day requires the completion of at least one EBD credit.
   Each four hours of EBD training equals one credit.
- EBD Evaluation Each employee participating in EBD completes an EBD Evaluation. The EBD evaluation is a written memorandum in which the employee reflects upon their experience with the EBD process.
- Independent Study This is an option for EBD which may not involve classroom training. Credit for independent study needs to correlate with the amount of time an employee should spend on it. For example, if an employee is expected to spend twelve hours completing an independent study project, the employee should be given three EBD credits. This is consistent with the credit amounts awarded for classroom training.

Examples of independent study are as follows:

- An officer voluntarily agrees to prepare and present a briefing to co-workers regarding the circumstances regarding his/her conduct resulting in the participation in EBD. The unit commander can assign an EBD credit value of one or more credits depending on the time, effort, quantity and relevance of the briefing(s).
- An officer voluntarily agrees to prepare an in-depth topic specific research paper. The paper will be relevant to the behavior that resulted in his/her participation in EBD. The unit commander can assign one EBD credit for each four hours (on-duty) that an employee spends preparing the research paper.
- The officer voluntarily agrees to participate in a community-based activity which is related to the circumstances regarding his/her conduct resulting in their participation in EBD. The unit commander can assign one EBD credit for each four hours (onduty) that an employee spends providing community service.

#### **CONCLUSIONS**

The research suggests that present police disciplinary policies may lead to stress, lower morale, a lack of commitment to the organization, embitterment, and decreased performance. Positive disciplinary programs such as Education Based Discipline have the potential to alleviate stress, to increase organizational compliance, commitment and performance. Effective and lasting compliance can be realized through progressive and innovative disciplinary strategies that positively reinforce proper behavior among police officers.

Officers must know that, when and if they engage in misconduct, they will receive fair and appropriate discipline commensurate with the level of misconduct. To do otherwise will have stressful consequences for both the individual officer and the police organization. An effective disciplinary system is one that is fairly administered, consistent and based upon department-wide standards, and designed to ensure timely results. An effective disciplinary system results in strengthened relationships and increased levels of trust within the department as well as with the community (Baca, 2008; Denver discipline handbook, 2008).

The present punishment based police system not only has low impact but also can lead to bitterness, decreased commitment to organizational goals, and less than acceptable future performance. Corrective discipline, based on a system that teaches correct behaviors in police work, can help to alleviate this sort of organizational distancing and increase commitment. The overall objectives of a disciplinary system are to facilitate the orderly functioning and operation of the police organization; to ensure employee adherence to reasonable and acceptable standards of performance and conduct; and to provide fair and equitable consequences for failing to adhere to those standards. Unfortunately, punishment- centered disciplinary strategies seldom accomplish these goals. An effective disciplinary system is one that is fairly administered, consistent, based upon department-wide standards, and designed to ensure timely results. An effective disciplinary system results in strengthened relationships and increased levels of trust within the department as well as with the community. In short, the individual, police organization, and the community will benefit from a disciplinary system that adds to better morale and performance (Baca, 2008).

Programs like Education Based Discipline have the potential to serve as model for modern police organizations. Police organizations have long had the reputation of being resistant to change; however, it is not so much the fault of police organizations as it is for the introduction of reasonable and sound ideas for change. EBD shows a new promise for change.

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# Suicide Intervention: **Basic Processes and Strategies**

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Abstract: Dealing with a subject in suicidal crisis requires a certain set of communication and empathic skills. This article outlines some facts and misconceptions about suicide, then describes some practical intervention strategies from the fields of crisis intervention and emergency mental health. [International Journal of Emergency Mental Health, 2011, 13(1), pp. 37-42].

Key words: crisis intervantion; emergancy mental health; psychological emergencies; self-injury; suicide; suicide intervention

Of all the mental health crises that public safety and emergency mental health responders encounter in their work, the threatened suicide of a civilian evokes some of the most mixed emotions. Unlike a hostage crisis, there are no "innocent third parties" at stake (although many hostage situations do evolve out of suicidal crises tinged with rage), so the sense of heroic urgency may not be as compelling. At the same time, many people, including many professionals, feel a twinge of creepy revulsion when faced with someone who can't "suck it up" and appears to be taking the "easy way out." Whether you're the first responder on the scene or a member of a specialized crisis response team, this article will provide some basic background and insight into the suicidal process, and will make some recommendations for intervention.

Laurence Miller, PhD is a clinical, forensic, and consulting psychologist in Boca Raton, Florida, and editor of IJEMH. Dr. Miller can be reached at 561-392-8881 or at docmilphd@aol.com. NOTE: The information provided herein is for educational purposes and is not intended to take the place of adequate practical training and experience.

#### Suicide: Facts and Fictions

Many citizens, law enforcement professionals, and even some mental health clinicians, are misinformed about the nature of suicide. The following represent some of the more frequently misunderstood issues (Baechler, 1979; Bongar, 2002).

Those who threaten suicide don't really do it. The number of suicidal threats is far greater than the number of suicidal acts and most such threats are not followed by an actual suicide. But attempted or completed suicides are often preceded by one or more suicidal threats, so each threat has to be taken seriously. Most psychologists think of suicidal threats or gestures in clinically depressed subjects in much the same way as physicians consider chest pains in patients at risk for heart attack: most may be false alarms but, in both cases, if you miss the real one, the patient is dead. It is also true that many disturbed people use suicidal threats as an attention-seeking or manipulative ploy. But responding in a forthright way demonstrates both concern for the subject and the fact that there are real consequences (e.g. temporary

involuntary commitment, a permanent mental health record) for "playing games." Therefore, all suicidal threats should be taken seriously.

Discussing suicide will impel the person to do it. Wellmeaning friends, family members, first responders, and even some clinicians may avoid asking a subject about suicidal ideation for fear of "putting ideas in her head." In fact, just the opposite is usually true. Most depressed persons have already thought of suicide, indeed, may be currently ruminating about it but reluctant to bring it up for fear of being seen as crazy or of having restrictive action taken. Yet most are actually relieved to have another person question them about their suicidal thoughts because it gives them the opportunity to discuss their fears and concerns. Many people express suicidal intentions or make suicidal gestures because they're really hoping to be rescued. If someone has actually not been considering suicide, usually the only consequence of your raising the issue will be the person's disavowing it. But it is highly unlikely that an otherwise nonsuicidal person is going to abruptly decide to kill themselves just because you brought up the subject. Better to have as much information as possible, rather than too little.

Suicide is always an irrational act. Sometimes it is and sometimes it isn't. It is difficult for most people to relate to the excruciating mental pain that would drive a person to end his or her life, especially if, to our eyes, the situation "isn't all that bad," or the person seems to "have everything to live for." But a clinically depressed person who is overwhelmed by despair and hopelessness may not possess the rational perspective we might have when confronted with a similar challenge. In the depressed state, negatives are magnified and positives are discounted. In many such cases, a crushing accumulation of adverse life events squeezes any hope for the future out of the person's life, making the rationale for suicide seem crystal clear: if everything in life is pain and nothing is pleasure, and it's never going to end, then what's the point of going on? Always remember that psychological pain cannot be measured by a standard barometer - everybody's pain is real to them.

Suicide is always an impulsive act. Sometimes it is, in which case there is hardly sufficient time to intervene because the person completes the act with little or no warning. In many other cases, however, the individual will express his or her suicidal ideation to someone: family member, friend,

clergy, clinician, or 911 operator. In such cases, the person is at least somewhat ambivalent about taking his or her own life and this leaves room for intervention.

Individuals who commit suicide are mentally ill. In most cases, suicide does not just occur in an emotional vacuum, but takes place in the context of a history of mood disturbances and erratic behavior. Indeed, a high proportion of suicide attempters have had at least some prior contact with the mental health and/or legal systems. While there need not be a psychiatric diagnosis per se, most suicidal individuals are clinically depressed or struggling with some form of persecutory delusion, perhaps a combination of the two. Knowing the subject's history of mental illness is important mainly for predicting what kind of post-crisis life that person will be going back to, and thereby formulating an intervention strategy that realistically takes this variable into account.

Suicide runs in families. Mood disorders like depression and bipolar disorder usually have a genetic-familial component and suicide is an additional risk factor in these syndromes so, in that sense, suicide can be said to run in families. This does not mean, however, that someone with a family history of depression and suicide is predestined to take their own life, only that the risk is somewhat greater than in others without such a background. Again, as with other family medical risks, proper treatment can help many individuals "beat the odds" of their family history. Of course, during an actual suicidal crisis, the primary priority is to keep the individual *alive right now* so that he or she can be provided access to appropriate therapeutic services later.

Once suicidal, always suicidal. Again, partly true. As a general rule, a person who has attempted suicide once is at greater risk of attempting it again under conditions of stress that precipitate a depressive episode. Therefore, one important goal of any effective treatment is to give the person the coping skills necessary to reduce the frequency and intensity of these crises, and thereby make suicidality less of an automatic, reflexive choice for that individual.

Once the suicidal crisis has passed or the person's mood has improved, the danger is over. It may be over for that moment, but without follow-up treatment, there is increased risk of future crises, as noted above. This highlights the need for follow-up treatment after the immediate crisis has been resolved.

#### Warning Signs Of Suicide

Coworkers, family members, and friends can all be valuable resources in identifying people in distress who may be at risk for suicide. Clues may be few or many, verbal or behavioral, direct or indirect, with any combination possible (Miller, 2006, 2008).

Threatening self. Verbal self-threats can be direct: "I'd be better off with a bullet in my brain;" or indirect: "Enjoy the good times while you can – they never last."

Threatening others. Often, self-loathing is transmuted into hostility toward others, especially toward those believed to be responsible for the subject's plight. Verbal threats against others can be direct: "I oughta cap that damn supervisor for writing me up;" or indirect: "People with that kind of attitude deserve whatever's coming to them."

Nothing to lose. The subject behaves insubordinately or obnoxiously, without regard to career or family repercussions: "I'll come in to work whenever I damn please. What are they gonna do - fire me?" "Yeah, I called her a bitch she's gonna divorce me anyway and take the house and kids. so what do I care what she thinks?"

Surrender of weapons or other lethal means. The subject may fear his/her own impulses, but be reluctant to admit it: "I'm cleaning out my basement this week. Why don't you hold on to these guns for me?" "I've been a little forgetful lately, so I'm letting my husband hand me out my pills."

Cry for help. "I've been feeling exhausted lately. Maybe I ought to check in to the hospital to see if there's something wrong with me."

Brotherhood of the damned. "You know that news story about the guy in Ohio who got fired and divorced and killed his boss, his family and himself? I know how that poor bastard felt."

Overwhelmed. "My girlfriend just left me, my kids won't talk to me, my checks are bouncing, I'm drinking again, and the cops want to talk to me about some bullshit stolen car. I just can't take all this."

No way out. "If I go down for that stolen car thing, that's my last strike. I could go to jail when I didn't do nothing? No friggin' way that's happening."

Final plans. Without necessarily saving anything, the subject may be observed making or changing a will, paying off debts, showing an increased interest in religion, giving away possessions, making excessive donations to charities, and so on.

#### Intervention With The Suicidal Subject

If the warning signs have been missed, the first chance to intervene with a depressed, suicidal subject may come when the crisis is already peaking. The intervener's task now is to keep the subject alive long enough to get appropriate follow-up care, and this can be accomplished by applying some fundamental principles of crisis intervention (Dattilio & Friedman, 2000; Gilliland & James, 1993; Greenstone & Leviton, 2001; Kleespies, 1998).

#### Define the Problem.

While some personal crises relate to a specific incident, many evolve cumulatively as the result of a number of overlapping stressors, until a "breaking point" is reached. In such cases, the subject himself may be unclear as to what exactly led to the present suicidal state. By helping the subject clarify what's plaguing him, nonlethal options and coping resources may be explored. It also shows that the intervener is listening and trying to understand.

Subject: My life is out of control. I don't see any way out.

Intervener: What's out of control?

- S: Everything, man, everything. The job, my wife – it's all crap.
- I: Can you give me an example? What about the job?
- S: I work like a slave all year, put in for extra overtime, volunteer for the boss's pet programs, and then they tell me the city says there's no more raises, overtime, or bonuses this year - that's after we already put the down payment on the new house.
  - *I*: Is that related to the wife thing?
- S: Yeah, so she's all over me now because she's scared we'll lose the house. So it's nonstop fighting. And on top of that, Human Resources is after me because of some bogus customer complaints.
  - I: So you got caught by surprise with the no-raise

thing, plus the HR complaint, and now all the family plans are backed up. And everybody's freaked.

S: Yeah, that's about it.

#### Ensure Safety.

Without seeming tricky or manipulative, the intervener should encourage the subject to put even a few short steps between the idea of self-destruction and the act itself.

- *I:* Is there anything in there with you that could hurt you?
- S: I got a Glock with a full mag. Yeah, that could hurt someone.
- *I:* Any chance of you putting the gun away while we talk?
- S: So what, so you can all bust in here and drag me away to the nut house?
- I: Actually, I just want to make sure you're safe. If you're gonna do something, then you're gonna do it; but for right now, how about popping out the mag and the cap in the chamber, and putting everything on the table in front of you. That way, if you really want the gun, it's right there, but at least you'll give yourself a second to think about it.

#### Provide Support.

Remember that the purpose of crisis intervention is not to solve all of the subject's problems in this one encounter, but to instill just enough motivation for him or her to emerge from the danger zone. The intervener should keep the conversation focused on resolving the present crisis, perhaps gently suggesting that the larger issues can be dealt with later – which subtly implies that there will indeed be a "later." In the meantime, just "being there" with the subject helps reduce his/her sense of isolation.

- *I:* When a lot of crap happens at once, it can seem like that's all there ever was, even if there was some good stuff tucked away in there.
  - S: Good stuff, what good stuff?
- *I:* Sometimes looking at things in a different way, trying things out you didn't do before, sometimes just staying away from certain people or situations, things

like that. At least it may be worth a shot. But right now, all I'm saying is I hear where you're coming from, I hear a world of hurt, and I'm hoping you can get things together for yourself.

S: I dunno, man, but hey, thanks anyway.

#### Examine Atlernatives.

Often, subjects in crisis are so fixated on their pain and hopelessness that their cognitive tunnel vision prevents them from seeing any way out. The intervener should gently expand the range of nonlethal options for resolving the crisis situation. Typically, this takes one of two forms: accessing practical supports and utilizing coping mechanisms.

Practical Supports. Are there any persons or groups that are immediately available to help the subject through the crisis until he or she can obtain follow-up care? The intervener must always be mindful of the risks and liabilities of relying on these support people instead of professional responders, and should be prepared to make the call to commit the subject involuntarily if he truly represents a danger to himself.

- *S*: I already told you, I'm not going to some damn hospital to be locked up and pumped full of drugs.
- *I:* Okay, let's leave the hospital out of it. I know you told me about your problems with the job and your wife, but is there anyone you know out there who you trust, who could stand up for you and help you out?
- S: I dunno, maybe my friend Dave. We worked at the shop together, and we got to be buddies. He's a good guy, down to earth.
- *I:* If Dave agreed to look after you for the rest of the weekend, till things cool off, would that be okay with you?
  - S: I guess so.

Coping Mechanisms. These can consist of cognitive strategies, religious faith, distracting activities, accessing positive images and memories of family, or successful handling of crises in the past, that show the subject that hope is at least possible.

- *I:* You said something earlier about how you've had crap happen to you before. Can you give me an example?
  - S: Well, about six years ago, I got fired from a

job for stealing, but it was really some other guy who pinned it on me. Their investigation was sloppy, so I filed a union grievance, and we ended up working out a deal where I'd resign and the charges wouldn't go on my record. Even though I wasn't guilty, I took the deal. Now I couldn't qualify for the security job I wanted, so that's how I got this job, which ended up paying more and being a pretty good job – till this shit all started happening.

I: So you went from almost being fired and busted to getting a better job. It was f\*\*\*ed-up to be falsely accused, but you handled it, and you made it come out the best way possible. When you put your mind to something, it seems, you're able to work it out.

#### Make a Plan and Obtain Committment.

Again, this involves a combination of both practical supports and coping mechanisms, as well as both short-term and longer-term plans.

- I: Okay, I want to make sure I have everything straight. You're gonna chill with Dave for the weekend, and first thing Monday morning, you're gonna contact your EAP or go over to County Clinic so you can get some help in dealing with this, all right?
- S: Now I gotta see a shrink for the rest of my life?
- I: Probably not. But you may need a few sessions just to straighten things out. Let's do this right, so that in a couple of months, it'll all be just a bad memory, okay?
  - S: It's gonna be a long weekend, man.
- *I*: Hey, I respect what you're doing; it's not easy. But you'll make it.

#### **Post-Crisis Mental Health Intervention**

When the acute crisis has passed, referral to a mental health clinician is crucial for two reasons. First, if this is a work-related issue, a psychologist may have to perform a fitness-for-duty evaluation to determine if the employee is able to return to work (Gold & Shuman, 2009; Miller, 2007; Stone, 2000). Second, specialized psychotherapeutic techniques may be applied, that involve a combination of emotional exploration, realistic confidence-building, and practical problem-solving approaches. As in any area of crisis psychology, there is no cookbook formula for dealing with suicidal subjects, either in the acute crisis stage, or at follow-up, but applying the fundamental lessons of effective crisis intervention may not only save the subject's life in the short term, but even nudge his or her life in a more productive and satisfying direction.

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# Selected Annotated Journal Resources

Justin Chen, M.S. and Rebecca J. Dean, M.S.

Mclean, C. P., Handa, S., Dickstein, B. D., Benson, T. A., Baker, M. T., Isler, W. C., Peterson, A. L., & Litz, B. T. (2011). Posttraumatic growth and posttraumatic stress among military medical personnel. Psychological Trauma: Theory, Research, Practice, and Policy, Online First Publication, March 28, 2011. doi: 10.1037/a0022949

#### TYPE OF ARTICLE

Original empirical investigation

#### **OBJECTIVE/PURPOSE OF THE STUDY**

To examine how different levels and types of exposure to stress relate to positive and negative mental health outcomes among military medical personnel deployed in Iraq.

#### **METHODS**

#### **Participants**

- Participants were 253 Air Force medical personnel who recently returned from deployment in Iraq as part of Operation Iraqi Freedom.
- Participants were at least 18 years of age, and ranged in rank (E1-E9, which is comprised of enlisted, junior noncommissioned officers, and senior noncommissioned officers; O1-O6, which is comprised of company and field grade officers), and length of military service (0 – 30+ years).
- These participants were assessed for posttraumatic growth (PTG), posttraumatic stress disorder (PTSD) symptoms, healthcare stress exposure, combat stress exposure, personal stress, and positive military experiences.

Inclusion criteria were as follows: (1) individuals no longer deployed in combat, (2) individuals not located at their originating large medical center, (3) individuals who requested surveys, provided a mailing address, and returned the survey.

#### **Materials**

- The Posttraumatic Growth Inventory (PTGI) was used to assess personal growth after a range of stressful experiences.
- The PTSD Checklist, Military Version (PCL-M) was used to assess the severity of PTSD symptoms.
- The Military Healthcare Stressor Scale (MHSS) was used to assess exposure to typical stressors associated with healthcare practice in a combat environment.
- The Combat Experiences Scale (CES) was used to assess stressful experiences that may have occurred during deployment.
- The Current Stressors/Adversities Checklist (CSAC) was used to measure the extent to which respondents are currently troubled or concerned by common life stressors.
- The General Military Experiences Scale (GMES) was used to assess thoughts and appraisals of current military experiences.

#### **Procedure**

- Data for this study were collected as part of a larger, ongoing longitudinal study funded by the United States Air Force Surgeon General's Operational Medicine Research Program.
- For the larger, parent study, participants are medical personnel deploying from a large medical center to

- serve as part of the expeditionary medical group in Iraq between September 2004 and December 2009.
- For the parent study, participants were asked to voluntarily complete surveys on five occasions: (1) pre-deployment, (2) two months after the start of deployment, (3) one month after returning from a four-month deployment, (4) six months after return from deployment, and (5) 12 months after returning from deployment. Data from the third time point were used for this study.
- Potential participants were contacted by e-mail prior to the mailing of post-redeployment surveys. Those who qualified and expressed interest in participating in the study were sent a survey and a return envelope.
- All procedures and materials were approved by the institutional review boards at the large medical center and the VA Boston Healthcare System.

#### STATISTICAL ANALYSES

- Hierarchical regression analyses were used to examine

   (1) combat stress exposure and PTSD symptoms, (2)
   combat stress exposure and PTG, (3) healthcare stress exposure and PTSD symptoms, and (4) healthcare stress exposure and PTG.
- Controlled for influence of positive military experiences, as well as current personal stressors by entering GMES and CSAC scores as the first step in all regression analyses.
- For each of the four regression models, the independent measures were entered in two hierarchical steps: (1) linear predictor (CES or MHSS) and control variables (GMES and CSAC), (2) quadratic predictor (CES or MHSS).

#### **RESULTS**

- Of the participants, 23% fell above the cut off score of 32 on the PCL-M.
- Results from the multiple regression analysis for combat stress exposure on PTSD showed that CES-linear predicting PTSD was significant, and that CES-linear had a significant positive regression weight.
- Results from the multiple regression analyses for PTG on combat stress exposure revealed that CES-linear predicting PTG was significant, and that CES-linear had a significant positive regression weight. The addition of CES-quadratic in step 2 produced a significant increase

- in  $R^2$ , with CES-quadratic showing a significant positive relationship to the criterion.
- PTSD symptoms were linearly related to CES scores such that combat stress exposure was positively associated with greater PTSD symptoms.
- PTG had a positive linear and a negative quadratic relationship with CES scores; PTG increased as scores on the CES rose from low to moderate, and began to decline as CES scores continued to increase.
- Healthcare stress exposure was found to have a significant positive relationship with PTSD, and a significant negative relationship with PTG.
- Symptoms of PTSD had a positive linear and a positive quadratic relationship with healthcare stress exposure, whereas PTG had a positive linear and a negative quadratic relationship.

#### **CONCLUSIONS/SUMMARY**

- Results indicate that higher levels of combat stress and healthcare stress were associated with higher levels of PTSD symptom levels.
- Similarly, combat stress and healthcare stress were associated with higher levels of PTG until the highest stress levels, where PTG levels tapered off.
- One limitation of this study is that the collected data are cross-sectional, which made it difficult for the researchers to rule out potential third variables.
- A second limitation is that the CES and the MHSS have not been assessed for external validity, construct validity, and correspondence between CES and MHSS scores.

#### **CONTRIBUTIONS/IMPLICATIONS**

 This study enhances a growing body of literature that suggests that growth and emotional distress are not mutually exclusive. In fact, this study found that moderate levels of stress promote high levels of growth.

Harris, J. I., Erbes, C. R., Engdahl, B. E., Thuras, P., Murray-Swank, N., Grace, D., Ogden, H., Olson, R. H. A., Winskowski, A. M., Bacon, R., Malec, C., Campion, K., & Le, T. (2011). The effectiveness of a trauma-focused spiritually integrated intervention for veterans exposed to trauma. *Journal of Clinical Psychology*, 67, 425-438. doi: 10.1002/jclp,20777

#### TYPE OF ARTICLE

Original Empirical Investigation.

#### OBJECTIVE/PURPOSE OF THE ARTICLE

To empirically evaluate the efficacy of the Building Spiritual Strength program in reducing symptoms of PTSD in military veterans who identify as "trauma survivors"

#### **METHODS**

#### **Participants**

- The participants were 54 veterans who identified themselves as "trauma survivors."
- Of the participants, 48 were male and 6 were female; 40 identified themselves as Caucasian, 10 identified as Black, 3 identified as Hispanic, and 1 identified as Asian.
- The mean age of the participants was 45 years (SD =15.67), and the mean level of education was 15 years (SD = 2.55).
- The participants' military experiences varied widely, with 31 having served in Operation Iraqi Freedom and Operation Enduring Freedom; 22 having served in Vietnam or post-Vietnam conflicts; and 1 serving in World War II.
- With regard to religious affiliation, 33 participants identified as Protestant, 12 identified as Catholic, 9 identified as Other (comprised of Buddhism, Judaism, Eckanker, questioning their spirituality or practicing their own individual spirituality).
- Thirty-three participants reported utilizing other mental health services concurrently during the course of the study; 19 reported using psychiatric medication and counseling, 10 reported using psychiatric medications alone, and 4 reported only attending regular counseling.

#### **Materials**

- The Traumatic Life Events Questionnaire (TLEQ) was used to assess a history of trauma upon initial intake.
- The PTSD Checklist (PCL) was used to assess the participants' PTSD symptomatology at intake and after 8 weeks of participation in both the control and intervention groups.
- A structured interview that solicited self-report data such as age, gender, race, level of education, religious affili-

ation, marital status, use of mental health services and vocational status was given during the intake for each participant.

#### **Procedure**

- Participants were recruited from waiting areas at a Veterans Affairs Medical Center via informational fliers; newsletter announcements at religious organizations with outreach programs for veterans; and informational booths for veterans returning from combat deployments.
- Fifty-six individuals attended a screening session which included informed consent, assessment for appropriateness for group intervention, and assessment of spiritual history, trauma exposure, and the completion of initial measures.
- Inclusion criteria required that the participants be: (1) competent to give consent, (2) a military veteran with a history of trauma exposure, (3) not an imminent risk to harm self or others, (4) not acutely psychotic, and (5) able to commit to attend the group and complete homework assignments uninfluenced by drugs or alcohol.
- Of the 56 individuals who attended the initial screening session, 54 participated through the entirety of the study.
- Participants were randomly assigned to intervention or control groups via coin flip. Twenty-nine participants were placed in the control group, while 26 participants were placed in the intervention group.
- Participants in the intervention group participated in the 8-week Building Spiritual Strength program led by doctoral-level psychologist at either the VA Medical Center or at a community religious organization based on the veterans' preference and schedule availability.
- Participants in both treatment and control conditions completed measures of trauma symptoms at intake and at Week 8. Participants were paid \$20 for each completed measure.
- Six randomly selected sessions were audiotaped and independently rated for fidelity to the manual by research assistants trained by the first author. Inter-rater reliability was .97, and combined ratings indicated a 98.5% fidelity to the manual.
- Hypotheses were evaluated using analysis of variance (ANOVA) procedures to compare the control and treatment groups on posttreatment PTSD scores.
- Hypotheses of BSS effectiveness was evaluated using

- a 2 (treatment) by 2 (race) by 2 (other treatment status) analysis of covariance (ANCOVA), including Week 8 PCL scores as the dependent variable and baseline PCL scores as a covariate.
- To address potential confounding variables, the relation between demographic variables and baseline PTSD scores was examined to select variables for inclusion as covariates in the analysis.
- Trends relevant to near significant interactions were examined by computing the correlations between experimental and control conditions and Week 8 PCL scores for majority and minority race groups.
- Logistic regression analyses were used to further examine variables relevant for veterans who met criteria for PTSD at the beginning of the study but did not meet criteria at the end of the study.
- A repeated measures ANOVA was run to determine if follow-up participation by members of the wait-list control group evidenced a similar pattern of improvement as found in members in the treatment condition.

#### RESULTS

- Participants reported exposure to an average of 13 traumatic events as measured by the TLEQ (SD = 10).
- Participants were asked to nominate their most traumatic event; combat was most commonly nominated (n = 20). followed by sudden death of a loved one (n = 9), traumatic events not identified on the TLEQ (n = 6), sexual assault (n = 4), motor vehicle accidents (n = 2), life threatening illness (n = 2), witnessing family violence as a child (n = 2), death threats (n = 1), physical abuse as a child (n = 1), sexual abuse as a child (n = 1), and sexual harassment (n = 1). Three participants chose not to nominate a most distressing trauma.
- At baseline assessment, 65% of the veterans scored at or above the PCL PTSD cutoff score.
- Demographic variables that emerged as correlates of PTSD symptoms included ongoing use of psychiatric medication (r = .51, p < .001) and ongoing use of psychotherapy (r = .45, p = .001).
- TLEQ scores did not correlate with PCL scores at a significant level (r = .20, p = .14)
- No significant interactions were found in the 2 (treatment) by 2 (race) by 2 (other treatment status) ANCOVA results, although race by experimental v. control condi-

- tion, and race by use of traditional mental health treatment approached statistical significance.
- The correlation between condition and Week 8 PCL scores was significant for the minority group at -.46 (p =.01), suggesting that members of minority ethnic groups may have derived more benefit from the intervention than members of the majority ethnic group whose correlation was -.05 (p = .62).
- The correlation between use of traditional mental health services and PCL scores was significant for the majority group at .46 (p<.001), while it was insignificant for the minority group, which suggests that Caucasians with high levels of symptoms were more likely to seek traditional treatment, and that symptom severity did not appear to be a strong predictor of traditional mental health treatment seeking for minorities.
- Logistic regression found that for the individuals who met criteria for PTSD at the beginning of the study but not at the end of it were more likely to be in other treatments, and that these individuals were more likely to be in the PTSD positive group than the non-PTSD group.
- The change in PTSD scores for participants on the waitlist who chose to participate in the BSS treatment after completing the control condition was found to be significant (within-group t = 2.77, df = 20, p = .01).
- A supplemental repeated ANOVA was performed to determine if follow-up participation by members of the wait-list group evidenced a similar pattern of improvement as those in the treatment condition. The interaction of initial group assignment and time was not found to be statistically significant, F(1, 37) = .146, p = .71. indicating that both groups appeared to benefit from the intervention.

#### **CONCLUSIONS/SUMMARY**

- The BSS intervention appears to be helpful for veterans who seek to use spiritual resources to cope with the consequences of trauma. It may be particularly helpful for those who would ordinarily avoid mental health treatment due to stigma but would attend a support group for veterans at a local religious organization.
- Findings regarding the clinical significance of the reduction of PTSD symptoms are, at best, ambiguous due to the nature of spiritual versus trauma focused treatment design.

- A limitation of this study is that although the N was larger than any previous study, it was still modest overall.
- Another limitation of the study was that it did not utilize an active control group, and so it is possible that the BSS content was not the primary cause of the PCL score reductions.
- A third limitation of the BSS intervention was that some aspects of group content overlap with cognitive behavioral therapies, and so the content of the intervention is not exclusively spiritual.

#### CONTRIBUTIONS/IMPLICATIONS

- The results from the analyses suggested the BSS intervention would reduce symptoms of PTSD among veterans willing to volunteer for a spiritually integrated intervention. These results are consistent with previous studies of spiritually integrated interventions for trauma survivors.
- This study provides the best evidence to date that addressing spiritual concerns can reduce PTSD because this study utilized a control group, random assignment to control and treatment conditions, and a larger N than any previous study.

Classen, C. C., Palesh, O. G., Cavanaugh, C. E., Koopman, C., Kaupp, J. W., Kraemer, H. C., Aggarwal, R., & Spiegel, D. (2011). A comparison of trauma-focused and present-focused group therapy for survivors of childhood sexual abuse: A randomized controlled trial. Psychological Trauma: Theory. Research, Practice, and Policy, 3, 84-93.

#### TYPE OF ARTICLE

Original Empirical Investigation.

#### **OBJECTIVE/PURPOSE OF THE STUDY**

#### **METHODS**

#### **Participants**

- A sample of 166 women met inclusion criteria for this study; however, only 141 completed all the necessary baseline and follow-up measures.
- Inclusion criteria for this study were that the partici-

- pants, (1) be women, (2) be at least 18 years of age, (3) experienced at least one explicit memory of child sexual abuse between the ages 4-17 years with the perpetrator being at least 5 years older, (4) be able to talk about her childhood sexual abuse in a group setting, (5) met at least one of the following criteria within the past year: must have been sexually victimized, engaged in risky sex, or met the Diagnostic and Statistical Manual of Mental Disorders 4th Edition, Revised criteria for substance abuse or dependence.
- Exclusion criteria for this study were that participants could not (1) currently be experiencing a psychotic or cognitive disorder, (2) report ritual abuse, (3) currently receiving therapy, (4) actively suicidal within the past month, (5) or otherwise judged inappropriate (e.g., behaviorally or verbally threatening, hostile, or intoxicated at the screening or baseline assessment) for the group.

#### Materials

- The Sexual Experiences Survey (SES) was used to assess sexual victimization experiences of sexual coercion, attempted rape, and rape. The SES was modified from its original "yes or no" format to additionally asking participants how many times they had had each experience within the past 6 months.
- The Drug and Alcohol Use Interview (DAUI) was used to assess the amount of substance use within the past 3 months.
- The Sexual Risk Behavior Assessment Schedule (SR-BAS) is a structured interview modified for this study to assess sexual activity within the previous 6 months.
- The SES, DAUI, and SRBAS were used to calculate Total HIV Risk of the participants via the mean slope for each risk factor.
- The PTSD Checklist Specific (PTSD S) was used to assess PTSD symptoms of the participants.
- The Inventory of Interpersonal Problems (IIP) was used to assess interpersonal difficulty.
- The Trauma Symptom Inventory (TSI) was utilized to assess a range of symptoms associated with trauma such as depression, anger/irritability, dissociation, sexual concerns, etc... in the past 6 months.
- The Posttraumatic Growth Inventory (PTGI) was used to assess positive outcome as a result of trauma.

#### **Procedure**

- Participants were recruited through advertisements in newspapers and community centers, public service announcements, and fliers in the San Francisco Bay Area. Eligibility was reviewed and confirmed by the project director.
- The SES, DAUI, SRBAS, PTSD S, IIP, and TSI were administered as at the baseline time. Participants were paid \$25 for the completion of baseline and posttreatment assessments.
- After the completion of baseline measures, cohorts of 24 participants were randomly assigned to one of three conditions: (1) trauma focused group therapy (TFGT), (2) present focused group therapy (PFGT), (3) waitlist (control). Each cohort consisted of 8 participants per group with 7 total cohorts.
- Treatment was provided by 22 therapists with prior experience treating trauma. Therapist experience included 8 psychologists, 2 psychiatrists, and 10 master's level clinicians. Each group was provided with 2 therapists and all therapists were women.
- Prior to the beginning of this study, all therapists were trained in either PFGT or TFGT, depending on which type of group they were assigned to lead.
- Both PFGT and TFGT were offered in 24 weekly sessions with each session lasting 90 minutes. Those in the Waitlist condition were offered to participate in TFGT after the 6 month follow-up.
- The interventions were not highly structured, but guidelines were provided in each manual regarding the nature of the work expected to be occurring at the beginning, middle, and final sessions.
- Initial sessions for both treatment conditions focused on establishing trust and safety in the group, identifying treatment goals, orienting members to the treatment approach, and building a therapeutic alliance. During the second or third session, psychoeducation was provided regarding sexual revictimization, risky sex, and addiction to drugs and alcohol as HIV risk factors. TFGT differed from PFGT during the initial phase, with TFGT participants being encouraged to begin discussing traumatic experiences, whereas PFGT participants were redirected to the here-and-now.
- Middle sessions began around the 3<sup>rd</sup> or 4<sup>th</sup> week for both treatment conditions. In TFGT, the focus was on helping

- participants discuss their trauma histories in a supportive and caring environment. In PFGT, participants were encouraged to attend to their immediate experiences in the group, particularly in relation to interactions with the leader and with each other, and to link this to their behavior outside of the group.
- In the final treatment phase, which lasted approximately 4 weeks, the focus for both TFGT and PFGT was on consolidating what had been learned, working through issues raised by termination, and identifying future goals.
- Treatment fidelity was assessed by participants after each session via a brief post-session self-questionnaire about the amount of time spent talking about various topics. Additionally, one session from each group was randomly selected and rated by two objective raters based on the same questionnaire.
- All participants received case management from a licensed clinical psychologist who was blind to treatment condition. This was done to provide support services to mitigate dropouts and ensure the participants' well being, which included crisis management. The case manager conducted an initial assessment with each participant, and contacted participants once a month for a brief check
- Primary outcome variables (risky sex, substance use, revictimization, and PTSD symptoms) and secondary outcome variables were assessed at baseline, posttreatment, and at 6 months posttreatment using all baseline measures. The PTGI was also administered at posttreatment and at 6 months posttreatment to measure potential growth. Participants were paid \$50 for the completion and return of the 6 months posttreatment measures.
- Data was analyzed using the Intention-to-Treat, model with all participants analyzed in their randomly assigned groups. Intention-to-Treat analysis is an analysis based on the initial treatment intent, not on the treatment eventually administered. That is, all who begin treatment are considered to be part of the trial, regardless of whether the participant finishes treatment or not. Intention-to-Treat analysis is utilized to
- The primary and secondary outcome measures were compared using analysis of variance (ANOVA).
- Adequate Dose analyses were conducted using ANOVA as well, with an adequate dose defined as attending at least 18 (75%) of the sessions. Adequate Dose analysis

- states that an individual can be declared as a participant once they have attended a minimum amount of sessions. Those who do not meet the minimum cannot be counted as participants.
- Total HIV risk score for each participant was calculated for each participant using a mean slope of change on SES, DAUI, and SRBAS over time.
- Data were analyzed at the group level rather than at the individual level due to the fact that analysis using hierarchical linear models proved obstinate.
- Effect sizes were calculated at the individual level and were calculated taking the effect of being in a group into account using the formula: ES (individual) = ES (group)  $\sqrt{n}$  where n is the average number of participants in the groups. Effect sizes were calculated using Cohen's d at the group level.
- To test whether there were significant changes over time within each condition, one-sample t tests comparing the slopes against a flat slope for each variable.
- To test the validity of participant and objective observer treatment fidelity ratings, a Spearman rank order correlation between the mean participant ratings and the objective ratings for the randomly selected session was calculated.

#### **RESULTS**

- Sixteen participants (29%) randomized to TFGT did not attend any therapy sessions compared with eight participants (14%) in the PFT condition ( $x^2 = 3.59$ , p =.06).
- Of the 39 participants who attended TFGT sessions, 31 (775) attended at least 75% of them; of the 48 (86%) participants in PFGT, 30 (61%) attended at least 76% of the sessions ( $x^2 = 3.36$ , p = .06).
- Intention-to-Treat analysis of total HIV risk scores did not show an overall effect for the condition, F(2, 18) =2.62, p = .10, nor did the Adequate Dose analysis F(2,18) = 1.68, p = .22).
- Intention-to-Treat planned comparisons showed a statistical advantage of PFGT over TFGT for HIV risk t(12) = 2.26, p < .05.
- Adequate dose planned comparisons showed a statistical advantage of PFGT over TFGT for HIV risk t(12) =1.83, p = .09.
- When comparing both treatment conditions combined

- to the waitlist control on the primary outcome measures, planned comparisons revealed no advantage of treatment for total HIV risk in either Intention-to-Treat, t(19) =0.37, p = .72, or Adequate Dose analysis, t(19) .006, p= .95.
- PFGT was compared to the waitlist control. A post hoc analysis revealed no advantage of PFGT over the waitlist control t(12) = 1.33, p = .17.
- Intention-to-Treat analysis of PTSD total severity scores indicated a trend for an overall effect of condition,  $F(2, \frac{1}{2})$ 18) = 3.36, p = .06, with the Adequate Dose analysis showing an overall effect of condition F(2, 18) = 3.36, p = .06.
- Intention-to-Treat analysis of PFGT and TFGT on PTSD severity showed no differences, t(12) = 0.91, p = .37, nor did Adequate Dose analysis when comparing PFGT and TFGT on PTSD total severity scores, t(12) = 0.12, p = .91.
- Both PFGT and TFGT showed an advantage over the waitlist control in Intention-to-Treat analysis, t(19) =2.43, p < .05, and Adequate Dose analysis t(19) = 3.59, p < .01. All conditions showed a reduction in PTSD severity over time.
- Intention-to-Treat analyses on the PTSD subscales revealed overall effects for reexperiencing, F(2, 18)= 12.56, p < .001, and a trend for hyperarousal, F(2,18) = 2.99, p = .08. The Adequate Dose analyses also revealed overall effects for reexperiencing, F(2, 18) =20.54, p < .001, and hyperarousal, F(2, 18) = 9.78, p < .001.001. ITT planned comparisons revealed advantages for treatment on reexperiencing, t(19) = 4.98, p < .001, and hyperarousal, t(19) = 2.46, p < .05, as did the Adequate Dose analyses, t(19) = 6.40, p < .001, and t(19) = 4.08, p < .001, respectively.
- Except for hyperarousal, where there was no change over time for the waitlist condition, all three conditions showed statistically significant change over time on each of the PTSD symptom categories.
- In the secondary outcomes, there was an overall effect for anger/irritability in both ITT, F(2, 18) = 19.91, p <.001, and Adequate Dose, F(2, 18) = 11.03, p < .001.
- Planned comparisons showed that TFGT had a significantly greater reduction in anger/irritability compared with PFGT in both Intention-to-Treat, t(12) = 3.52, p <.01, and Adequate Dose, t(12) = 3.09, p < .01.

- Only TFGT showed a significant reduction in anger/ irritability over time. Anger/irritability was the only outcome where there was an advantage of TFGT over PFGT.
- Intention-to-Treat analysis revealed a trend for overall effects on impaired self-reference, F(2, 18) = 2.84, p =.09, and the Adequate Dose analysis revealed overall effects for impaired self-reference, F(2, 18) = 3.70, p <.05.
- Intention-to-Treat planned comparisons showed an advantage for treatment compared with waitlist condition on impaired self-reference, t(19) = 2.32, p < .05, as did the Adequate Dose planned comparison, t(19) = 2.53, p
- Spearman rank order correlations of participant ratings with objective ratings was .79 (p < .001) for the amount of time spent discussing their childhood experiences, .52 (p < .05) for the number of times the therapists made comments linking current life experiences with childhood experiences, .39 (p = .15) for the number of times the therapists asked about the past, and .42 (p = .12) for the amount of time spent discussing current problems.
- Participant ratings of the amount of time spent discussing childhood experiences showed a mean of 4.2 sessions for TFGT and 2.1 sessions for PFGT, which were significantly different, t(12) = 14.83, p < .001.
- Participant ratings suggest that TFGT spent less time on current problems compared with PFGT, t(12) = 2.94, p < .05, with means of 4.8 and 5.6 sessions, respectively.
- A trend for statistically significant difference in time spent discussing the here-and-now was found t(12) =1.96, p = .08, with a mean of 4.5 for TFGT and 5.0 for PFGT.
- Non-study treatment, defined as treatment provided by lay or professional therapists involving either individual, couple, or group therapy, was received by 12 (21%) in the waitlist condition, 12 (21%) in the TFGT condition, and 11 (19%) in the PFGT condition.

#### **CONCLUSIONS/SUMMARY**

PFGT was found to be more effective than TFGT in reducing overall HIV risk; however, there was no advantage when compared with the waitlist control. Thus, these results do not support the use of PFGT or TFGT

- to reduce sexual revictimization or behaviors that put women at risk for HIV.
- No advantage was found when comparing PFGT and TFGT in reducing PTSD symptoms; however, both treatments were shown to be more effective than the waitlist control
- TFGT produced greater reductions in anger when compared to PFGT.
- In treatment versus waitlist control comparisons, treatment groups showed a greater reduction in hyperarousal, reexperiencing, anger, impaired self-reference, depression, dissociation, and sexual concerns.
- One limitation for this study was that the researchers did not attempt to assess a participant's readiness for TFGT beyond requiring that participants felt ready to discuss their childhood sexual abuse in a group.
- A second limitation for this study was that the length of treatment may have been insufficient to effect change. All assessments were self-report and asking participants to recall the number of times they engaged in a specific behavior over the past 6 months may have lead to inaccurate estimates.
- Another limitation to this study was that the sample size limited the ability of the researchers to detect differences.
- A last limitation for this study was that assessment of treatment fidelity was based primarily on participant reports.

#### CONTRIBUTIONS/IMPLICATIONS

- The failure of this study to provide evidence that TFGT is more effective than PFGT in reducing PTSD raises questions about the specific and nonspecific factors of each treatment. More research should be done to examine whether treatment benefit was derived from nonspecific factors, such as simply sharing childhood sexual abuse experiences with other victims, or if there is another underlying mechanism promoting treatment benefits.
- Future studies should carefully assess the readiness of childhood sexual abuse victims before engaging in Stage II trauma work.
- Additional research is still needed to determine the most effective interventions for reducing sexual revictimization and HIV risk behaviors in this population.

Pineles, S.L., Mostoufi, S.M., Ready, C.B., Street, A.E., Griffin, M.G., & Resick, P.A. (2011). Trauma reactivity, avoidant coping, and PTSD symptoms: A moderating relationship? Journal of Abnormal Psychology, 120(1), 240-246.

#### TYPE OF ARTICLE

Original empirical investigation.

#### **OBJECTIVE/PURPOSE OF THE STUDY**

To examine avoidant coping as a moderator of the association between heart rate reactivity to a trauma monologue procedure (i.e., trauma reactivity) performed shortly after a traumatic event and severity of posttraumatic stress disorder (PTSD) symptoms measured several months later.

#### **METHODS**

#### **Participants**

- As part of a larger study, participants were women who were sexually or physically assaulted.
- In total, 55 participants were included in the study; 62% were single, 15% married or living with a partner, 24% separated or divorced; 69% were of African American descent, 29% Caucasian, 2% American Indian.
- The mean age of the sample was 29.2 years (SD = 7.5) and mean years of education was 12.7 (SD = 2.4).
- For most participants (85%), the traumatic event was sexual assault.
- Exclusion criteria included individuals who reported prescription drug use that might confound autonomic responses (e.g., beta blockers), demonstrated current psychosis, inebriation during assessment, or substantial reading difficulties.

#### **Materials**

- The screening included the Coping Strategies Inventory to determine the use of avoidance and approach coping strategies in response to a specific event, which in this study was the identified assault.
- The Clinician-Administered PTSD Scale (CAPS) was used to assess the frequency and intensity of PTSD symptoms at Time 1 and Time 2.

Trauma reactivity was assessed by measuring heart rate using a modular system throughout five phases each lasting 5 minutes: (a) initial baseline, (b) monologue about a neutral topic, (c) neutral recovery phase, (d) monologue about the traumatic event, and (e) trauma recovery phase.

#### **Procedure**

- Women were assessed within 1 month of the assault (Time 1 [T1]) and again 3 months postassault (Time 2 [T2]).
- The procedure order was (a) self-report questionnaires, (b) trauma monologue, and (c) diagnostic interviews.
- Participants sat alone for the first, third, and fifth phases and were told to relax but were not instructed on what to think about.
- Before each monologue phase (neutral and trauma), the interviewer gave each participant a prompt sheet that listed possible topics to discuss.
- During the neutral monologue phase, the interviewer listened as participants described some past neutrally valenced event from the prompt sheet (e.g., "a meal you cooked").
- During the trauma monologue phase, the interviewer listened as participants described the traumatic event as guided by the prompt sheet. Prompt questions included time, location, and their reactions, thoughts and feelings during the assault.

#### **RESULTS**

- Trauma reactivity was positively associated with PTSD symptom severity for relatively high endorsers of avoidant coping.
- Post hoc analysis indicated that trauma reactivity was positively associated with reexperiencing and numbing symptom severity for relatively high endorsers of avoidant coping.
- When assessing T2 PTSD diagnostic status as the outcome variable and trauma reactivity, coping style, and the interaction of coping style and trauma reactivity as the predictor variables, a significant main effect emerged for avoidant coping, when controlling for T1 PTSD diagnostic status.

#### **CONCLUSIONS/SUMMARY**

- Results suggest that a combination of high physiological reactivity and greater use of avoidant coping strategies may interfere with natural processing of trauma memories and therefore be associated with relatively more severe PTSD symptoms 3 months later.
- The combination of high reactivity to trauma reminders and limited use of avoidant coping strategies may be conducive to natural recovery from traumatic memories.
- This study provides the first empirical support for the theoretical assumption that avoidance would be more detrimental for individuals who are relatively more reactive to the trauma memory.
- One limitation of the study is that the analyses conducted did not adhere to the stricter definition of moderation that requires the moderator to temporally precede the independent variable.
- A second limitation is that the study has a relatively small sample size, which may have contributed to the null findings regarding interaction effects when predicting PTSD diagnostic status.
- Results from the study provide support for the theory that individuals who are relatively highly reliant on avoidant coping strategies and relatively highly reactive to trauma reminders may be at greatest risk of having their PTSD symptoms remain, or even increase, in the months following a traumatic event.

#### **CONTRIBUTIONS/IMPLICATIONS**

- The results of this study may help inform early intervention for trauma survivors and suggest that early intervention efforts may only be useful for certain subsets of trauma survivors.
- Results indicate that survivors who are both relatively reliant on avoidant coping strategies and highly reactive when discussing their traumatic event may be less likely to recover without intervention and, therefore, might benefit from early intervention targeted at reducing the use of avoidance coping strategies.
- These results represent an important initial attempt to identify the interactive effects critical for understanding the process of early recovery from traumatic events.

Owens, G.P., Walter, K.H., Chard, K.M, & Davis, P.A. (2011). Changes in mindfulness skills and treatment response among veterans in residential PTSD treatment. Psychological Trauma: Theory, Research, Practice, and Policy, Online First Publication, June 6, 2011. doi: 10.1037/a0024251

#### TYPE OF ARTICLE

Original Empirical Investigation.

#### OBJECTIVE/PURPOSE OF THE ARTICLE

- To examine the relation among mindfulness skills, PTSD, and depression severity for a veteran sample.
- To examine whether a change in mindfulness skills was related to a change in PTSD symptoms.

#### **METHODS**

#### **Participants**

- One hundred forty-nine veterans admitted to a PTSD Residential Rehabilitation Program (PRRP) at a VA Medical Center with a mean age of 51.38 years (SD =9.43).
- Of the participants, 75% were male and 25% were female; 62% of the sample was Caucasian, 36% African American, and 1% Native American.
- Participants served in various wars, 58% served in the Vietnam War era, 22% post-Vietnam War, 15% Persian Gulf War, 1% between Korean and Vietnam Wars, and 3% in Iraq/Afghanistan.
- Inclusion in the sample included meeting criteria for current or subthreshold PTSD, being referred to the program by a mental health practitioner or other health care provider in the VA system.
- Exclusionary criteria included current unmanaged psychosis, active substance dependence, a significant medical condition, or presence of suicidal or homicidal intentions.
- Some participants endorsed multiple experiences; however, the most common traumas were combat exposure (54%) and sexual assault (25%). The majority of traumas were sustained in the military (88%).
- Some participants presented with comorbid conditions, including major depressive disorder (62%), past alcohol

dependence (54%), past drug dependence (39%), and panic disorder (14%).

#### **Materials**

- The Clinician Administered PTSD Scale (CAPS) to assess current or subthreshold PTSD.
- The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) was used to assess the presence of Axis I Disorders.
- The PTSD Checklist-Stressor Specific Version (PCL-S) was used to measure PTSD symptomatology containing statements that correspond with diagnostic criteria in the DSM-IV.
- The Beck Depression Inventory-II (BDI-II) was used to assess the presence and severity of depressive symptoms.
- The Kentucky Inventory of Mindfulness Skills (KIMS) is a 39-item Likert-type scale used to measure facets of mindfulness that allow the individual to focus their attention in a nonjudgmental way, for example, "When I'm doing something, I'm only focused on what I'm doing, nothing else."

#### **Procedure**

- Participants completed a series of assessment instruments to determine their pretreatment diagnostic status.
- At posttreatment, participants were administered the same battery of measures to reassess their diagnostic status and other symptomatology.
- While in the VA, patients participated in seven weeks of intensive PTSD treatment using CPT in group and individual sessions, with an average of 12 group and 13 individual sessions.
- Participants also attended 15 additional group therapy sessions per week that covered a range of coping and health education topics. As part of these sessions, participants attended seven sessions of a mindfulness group.

#### **RESULTS**

- Mindfulness scores for both groups slightly (although not significantly) improved following the course of treatment.
- The overall model predicted clinician-assessed symptoms of PTSD at posttreatment.

- Veterans who improved their score on the Acting with Awareness subscale had lower PTSD symptom scores at posttreatment.
- Change in scores on the Describe, Acting with Awareness, and Accepting without Judgment subscales significantly predicted self-reported PTSD symptoms at the posttreatment assessment.
- Findings suggested that veterans who improved their score on the Acting with Awareness subscale were less likely to have a diagnosis of MDD at posttreatment. Specifically, for each point increase on the Acting with Awareness subscale, participants were 10% less likely to have a diagnosis of MDD at the posttreatment assessment.

#### **CONCLUSIONS/SUMMARY**

- Score improvement on the Acting with Awareness subscale predicted posttreatment clinician-rated measures of both PTSD and depression.
- Improvement in score on mindfulness subscales also predicted self-reported PTSD symptoms at posttreatment.
- The findings suggest that increases in an individual's ability to focus their attention on their actions and behavior in the moment are associated with lower PTSD symptoms.
- The findings suggest that participants who were better able to describe or label their experiences and emotions reported fewer symptoms of depression.
- The study suggests that further comparison studies should be conducted to examine mindfulness interventions alone in the treatment of PTSD and the effectiveness of having additional coping strategies.
- Limitations of the study include the lack of a randomized control trial, and its specialized population of veterans seeking inpatient care for PTSD at the VA hospital.
- Another imitation of this study is that after the study began, the mindfulness questionnaire used in this study was updated. Therefore, future studies should utilize the updated version.
- In addition, the current literature on mindfulness is not definitive in terms of whether available measures are sensitive to change and to what degree measures such as KMS assess trait versus state levels of mindfulness.

#### CONTRIBUTIONS/IMPLICATIONS

- The study contributes to the literature by investigating an emerging area of research on mindfulness.
- The current study has few exclusion criteria leading to a more representative clinical population of veterans in treatment for PTSD.

Polusny, M.A., Ries, B.J., Meis, L.A., DeGarmo, D., McCormick-Deaton, C.M., Thuras, P., & Erbes, C.R. (2011). Effects of parents' experiential avoidance and PTSD on adolescent disaster-related post-traumatic stress symptomatology. *Journal of Family Psychology*. 25(2), 220-229.

#### TYPE OF ARTICLE

Original longitudinal study.

#### **OBJECTIVE/PURPOSE OF THE STUDY**

 To investigate the conceptual model of the interrelationships between individual and parental risk factors on adolescents' disaster-related PTSD symptoms.

#### **METHODS**

#### **Participants**

- Participants were obtained through a large, crosssectional mailed survey of adolescents and their parents from a rural southern Minnesota community who were exposed to a series of severe tornadoes.
- All students enrolled in Grades 7 through 12 (*n* = 1,368) during the 1997 to 1998 school year in two public school districts and their parents/guardians were invited to participate in the study.

#### **Materials**

- The Impact of Event Scale-Revised (IES-R) was used to assess adolescents' and parents' disaster-related PTSD symptoms.
- A modified version of the Hurricane-Related Traumatic Experiences Questionnaire was used to assess adolescents' and parents' tornado-related traumatic disaster exposure.
- The Acceptance and Action Questionnaire (AAQ) was used to assess adolescents' and parents' experiential

avoidance, measuring attempts to control, escape, or avoid negatively evaluated thoughts, feelings, or memories.

#### **Procedure**

- Data collection began 6 months postdisaster and continued for a 10-week period.
- Each student's household was mailed a package including research questionnaires for parents and adolescents.
   Respondents were compensated \$10 for their participation.

#### RESULTS

- Disaster exposure was significantly associated with higher levels of adolescent experiential avoidance and parent experiential avoidance.
- Experiential avoidance predicted PTSD for adolescents and parents.
- Parent PTSD symptoms predicted adolescent PTSD, after controlling for adolescent and parent responses, disaster exposure, parent and adolescent age and gender.
- Parental PTSD provided an independent contribution to their children's disaster response.
- Parent PTSD moderated the effect of adolescent experiential avoidance on adolescent PTSD.

#### **CONCLUSIONS/SUMMARY**

- The results of the study supported the utility of the proposed conceptual model of individual and parental factors predicting adolescents' disaster-related PTSD.
- Experiential avoidance mediates the relationship between family disaster exposure and PTSD for both adolescents and their parents.
- Parent PTSD symptoms independently contributed to the prediction of adolescents' PTSD symptoms.
- Parents' postdisaster functioning moderated the effects of adolescents' experiential avoidance on their disasterrelated PTSD symptoms.
- Parents' posttraumatic functioning plays an important role in how adolescents respond to disasters.
- Parent experiential avoidance appears to impact adolescents' postdisaster reactions through contributions to poorer parental postdisaster functioning, which adds unique effects to the prediction of adolescent PTSD.

#### CONTRIBUTIONS/IMPLICATIONS

- The study adds to the evidence showing experiential avoidance contributes to the development and maintenance of PTSD in adults.
- Results of this study also highlight the need for parent training programs that can equip parents, especially those suffering PTSD, with the skills to help facilitate their children's recovery following disasters.
- The findings support the need for further research evaluating the efficacy of acceptance-based therapies targeting experiential avoidance applied to trauma exposed youth and their families.
- Such findings may be relevant to other trauma-exposed populations as well, including families of combat veterans returning deployment with PTSD and related psychopathology.

Correction: We wish to apologize to Rebecca J. Dean, M.S., co-author of the Mental Health Updates in Volume 12, #4, for our error in the reporting of her name in that issue. We are grateful for her contribution.



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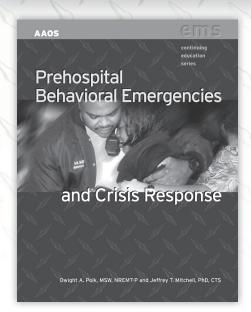
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# A Resource for All Health Care Providers **Responding to Mental Health Emergencies**



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American Academy of Orthopaedic Surgeons, Dwight A. Polk, and Jeffrey T. Mitchell

ISBN-13:978-0-7637-5120-3 \$41.95 • Paperback • 300 Pages • © 2009 Chevron Publishing is pleased to distribute the newest addition to the American Academy of Orthopaedic Surgeons (AAOS) Continuing Education Series: Prehospital Behavioral Emergencies and Crisis Response. Like all titles in this series, an Instructor's ToolKit CD-ROM including PowerPoint presentations and Lecture Outlines, is available to support this program.

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After serving as a firefighter /paramedic, Dr. Mitchell developed a comprehensive, systematic, integrated and multi-component crisis intervention program called "Critical Incident Stress Management." He has authored over 250 articles and 10 books in the stress and crisis intervention fields. He serves as an adjunct faculty member of the Emergency Management Institute of the Federal Emergency Management Agency.



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## Book and Media Reviews - Daniel Clark, Editor

## Crisis and Disaster Counseling: Lessons Learned from Hurricane Katrina and Other Disasters

By Priscilla Dass-Brailsford Sage Publications, 280 Pages, Soft Cover, \$51.95 Reviewed by James L. Greenstone, PhD

This edited work could have broad appeal to those who want to look at the range of approaches to disaster response. Whether it is a book designed for crisis counseling, disaster counseling, or the much needed crisis intervention and management, is for the author to better define and to differentiate in later editions.

The stated purpose of the text is to provide the skills needed to assist survivors of disaster, manmade and otherwise. It is a comprehensive collection of direct accounts of first responders from a variety of locations and disasters. It also states that it provides skill building approaches and pragmatic recommendations for providers, educators, advocates and policymakers. Children's issues and the aftermath of a disaster response are also addressed.

Other featured areas include:

- 1. A literature review on disaster response.
- 2. Multicultural issues in disasters.
- Skill building approaches.
- 4. Spiritual issues including grief, mourning and funeral practices.

The author and editor states that this is a book for graduate students, those training in crisis and disaster counseling and for those who want to know how to apply theory and research to practice and policy.

The Table of Contents of this edited edition is an ambitious attempt to cover the broad range of disaster response information. The Editor begins with an historical overview of what is called the, "crisis field." Although much is covered of great interest in this chapter, much is omitted about the history and developments in the discipline of Crisis Intervention. She then deals with Hurricane Katrina as well as a chapter titled, "Ignore the dead; we want the living." This reviewer

has not seen this addressed often enough in crisis management practices and procedures, and applauds this author. The major discussion in the field is about altered standards of care during crisis and disaster situations. Much more needs to be said by all working in this area. Response in disaster circumstances may necessarily need to be different. This is so even though all responders may be trained to a relevant standard of care, and expected to perform accordingly, both before and after disasters occur.

Also, the Editor presents several other chapters dealing with such issues as effective disaster and crisis intervention, as well as secondary trauma among responders. Finally, and she provides the concluding chapter to the book thus bringing it all together.

Chapter 5 of the book deals with families affected by Hurricane Katrina from the perspective of African-American survivors. Children and crises are addressed in Chapter 6.

Chapter 7 examines the perspectives of providers who serve the needs of displaced disaster survivors. Chapter 8 looks at the effects of disaster on older adults facing Hurricanes Katrina and Rita, and Chapter 9 discusses the spiritual dimensions of disaster care.

Chapter 10 presents an examination of rural and other diverse communities reacting in the face of disaster. Dislocation and relocation are two topics handled in Chapter 11. The federal governmental role is plumbed in Chapter 12.

Chapter 13 rounds out the diversity of this book with a discussion of a community-based approach to coping with crises in Africa.

The chapters 5, 7, 8, 9, 10, 11, 12 and 13, mentioned above, are important considerations in disaster work. However, they may better be addressed in a different venue so as not to confuse the stated purpose of this work. The consistency of an edited work is difficult to maintain as every editor would like to do. This may be the case here, and may represent the difficulties encountered by this reviewer.

This reviewer applauds the efforts of this Editor/Author. This book has far-reaching implications and important information for all of us who engage in disaster work. A stronger work might have been one that separated insights of the various authors from their diverse perspectives and

centered either on the broad range of issues therein, from one specifically addressing crisis intervention and procedures to be followed. An entire book, centered on crisis intervention procedures, communications, etc., and written altogether by this Editor/Author would have been a major contribution with significant impact. Perhaps, such a text will be forthcoming from her. As it stands, this work should be on the shelf of crisis interveners and disaster responders everywhere.

## **Counseling Individuals with Life-Threatening Illness**

By Kenneth J. Doka, Ph.D.
Springer Publishing Co., 2009, 281 pages, Hardcover, \$48.00
Reviewed by Daniel Clark, PhD

Dr. Kenneth Doka introduces his latest in a series of books dealing with grief and end-of-life issues by stating, "This book is meant to be a guide for anyone counseling or offering professional care to persons with life-threatening illness" (p. 2). Further, he asserts that "Life-threatening illness is not only a medical crisis: It is a social, psychological, and spiritual crisis as well. It not only affects the individual with the illness but also affects the family" (p. 2).

In this thorough treatment of the serious illness process, the author initially reviews historical perspectives on dying and illness, then focuses the next almost 50 pages on sensitivities and skills caregivers and counselors need to effectively work with individuals with life-threatening illnesses and their families. He strongly promotes open communication strategies such as active listening, empathic statements, self-disclosure, action statements, affirmation, etc.. Referencing Shneidman's (1978) early work on factors that make working with the dying unique, such as different rules, goals, and processes, he addresses the sensitivity essential for working across different age groups, populations, and cultures.

He concludes this early section by focusing on the impact that working with individuals with life-threatening illnesses has on the caregivers themselves. Caregivers may find it stressful to confront their own mortality, to accept the treatment choices of those in their care, and to perhaps ultimately grieve the death of their patient.

The next two chapters catalog extensive responses to life-threatening illnesses, including physical, cognitive, existential, emotional, behavioral, and spiritual responses. He then explores the illness experience itself: typical symptoms, disease trajectories (gradual, peaks and valleys, descending plateaus, etc.), and treatment impacts. Also important to the individual's response is the life cycle phase the individual is occupying – childhood, adult, or elderly.

The next five chapters chronicle Doka's model of illness phases. He begins with the prediagnostic phase, when individuals are assessing symptoms and deciding to seek care. This is followed by the diagnostic phase, which centers on the crisis or turning point when the individual's orientation towards life changes. The author characterizes this as a process of diagnosis, because most diagnoses require multiple tests conducted over a period of time. Individuals often seek to understand the diagnosis, the impact it may have on their lifestyle, develop strategies to deal with issues created by the disease, and ventilate feelings and fears. A common issue is deciding what information to share with whom, and at what point?

The third phase is the chronic phase, when individuals learn to cope with their disease and treatment. A key issue is recognizing that every significant change in their life has a ripple effect across every other part of their life, including relationships. Additionally, individuals often struggle with the meaning of the disease, asking, "why am I suffering?" and "why did this happen to me?"

Next is the recovery phase. Tasks in this phase include dealing with the physical, psychological, social, financial, and spiritual residues of illness, coping with ongoing fears of recurrence, and reconstructing one's life. The author states that any encounter with a crisis changes people; therefore, recovery does not mean that individuals simply return to their former life without change. As part of reconstruction, he recommends individuals ask themselves three questions: what do I want to leave behind as I begin this new phase of life? What do I want to keep from the illness experience? Moreover, what do I want to add?

The final phase is the terminal phase. This phase begins when the medical goal changes to providing comfort-oriented care. He returns to the theme of the importance of open communication, which focuses on the needs of the individual and aims to keep the dialogue open. He recounts an exercise a colleague used when she asked her professional conference audience, "what do dying persons need?" Typical replies included love, understanding, and respect, among others. She then asked, "what does a living person need?" Of course, the answers are the same, illustrating that certain basic human needs remain the same regardless of their health status.

The final chapter focuses directly on supporting families, defined as anyone who is part of a close inner circle, regardless of biological ties. He offers a list of factors that might either facilitate or hinder effective family adjustment to life-threatening illness, then reviews recommendations for supporting family members across the previously discussed five illness phases.

The author appends a series of discussion questions, role-plays, and case studies suitable for workshops, trainings, or class activities.

I highly recommend this book to mental health professionals, chaplains, health care providers, and CISM team members. This is a comprehensive resource, filled with practical and compassionate recommendations. It might also be very useful to the individuals with life-threatening illnesses themselves and their family members as they struggle to come to terms with the drastic changes in their lives.

Dr. Kenneth J. Doka is a Professor of Gerontology at the Graduate School of The College of New Rochelle and Senior Consultant to the Hospice Foundation of America. A prolific author, Dr. Doka's books include Grieving beyond Gender: Understanding the Ways Men and Woman Mourn; Cancer and End-of-Life Care; Diversity and End-of-Life Care; Living with Grief: Children and Adolescents; Living with Grief: Before and After Death; Death, Dying and Bereavement: Major Themes in Health and Social Welfare (a 4 Volume edited work); Pain Management at the End-of-Life: Bridging the Gap between Knowledge and Practice; Living with Grief: Ethical Dilemmas at the End of Life; and Disenfranchised Grief: New Directions, Challenges, and Strategies for Practice. In addition to these books, he has published over 100 articles and book chapters. Dr. Doka is editor of both Omega: The Journal of Death and Dying and Journeys: A Newsletter to Help in Bereavement.

Shneidman, E. (1978). Some aspects of psychotherapy with dying persons. In. C. Garfield (Ed.), Psychosocial care of the dying patient (pp. 201-218). New York: McGraw-Hill.

#### Therapy with Coerced or Reluctant Clients

By Stanley L. Brodsky Washington, DC: American Psychological Association, 2010, 233pp. Reviewed by Laurence Miller, PhD

Feeling underappreciated by the personnel you're trying to help? Well, boo-frickety-hoo: get used to it, bub, because that's how it goes in the help-'em-whether-they-want-it-ornot department. Most readers of this journal will not directly provide psychological services to the prisoners or psychiatric detainees who make up the bulk of the case material in this book, but we certainly will deal with a range of reluctant customers in the soldiers, cops, firefighters, EMTs, search and rescue personnel, and even some of our own clinician colleagues that we may be called up to counsel and advise. And the treatment issues are often remarkably similar.

Stanley Brodsky is already well-known within the field of forensic psychology as the author of several informative and engaging guides for clinicians who serve as expert witnesses in court. Now, he turns his attention to the clinical treatment of forensic clients. Effective practitioners who work with these populations will have to modify traditional psychotherapeutic strategies for establishing a working relationship, building trust, encouraging self-disclosure, providing concrete instructions and advice, and encouraging constructive behavior change. A particular challenge for therapists is dealing with a population who's verbal skills may be rudimentary and which, when present, have characteristically be used in the service of evasion and manipulation.

Additional recommendations include keeping therapeutic goals simple, striving for simplicity and clarity of communication, maintain "neutral empathy" and "provisional respect," knowing when to do most of the talking and when to shut up and listen, and offering reflective feedback in a user-friendly way.

One quibble I have with this book is the author's seemingly ironclad proscription against asking questions – ostensibly because such queries are prone to being seen as off-putting interrogations that threaten to alienate the already-reluctant and mistrustful client. However, there are ways of

making inquiries of our patients that don't necessarily come off as a waterboarding session, and skilled clinicians know how to do that. As with any blanket statement ("Never say 'no' to a hostage taker, or the negotiation is doomed!"), exceptions and modifications occasionally arise, and good clinicians need to possess the cognitive flexibility and technical expertise to handle a range of treatment crises and impasses.

Nevertheless, emergency mental health providers, as well as those clinicians who work as in-house or contracted providers of mental health services to public safety agencies, can learn a lot from this compact volume in dealing with their often reluctant and resistant "they-can-make-me-come-herebut-I ain't-tellin'-you-nothin'" clientele. As we all know, in most cases, we're doing fine just to keep the lid on, and in a few rare instances, we may pause a moment to enjoy the fleeting gratification of an occasional better-than-expected outcome – just don't expect any damn parades.

# Investigative and Forensic Interviewing: A Personality-Focused Approach

Craig N.Ackley, Shannon M. Mack, Kristin Beyer & Philip Erdberg Boca Raton, FL: CRC Press, 2011, 184pp. Reviewed by Laurence Miller, PhD

As do psychologists, law enforcement investigators receive training in how to conduct effective interviews. And, as for psychologists, the purpose of any interview is to obtain information about a subject that will be useful in planning a subsequent action. In the case of a clinical psychological interview, this is usually treatment; in the case of a forensic investigative interview, it may be arrest or prosecution. In either case, an essential part of conducting an effective interview is to gear it toward the psychological dynamics of the individual subject – in theory, at least.

But you wouldn't know this from the plethora of courses, guides, and manuals, in both psychology and law enforcement, that take a rigid, one-way-fits-all approach to interview and investigation, as if suspects, witnesses, or patients were all carbon copies of one another. So it is refreshing to see an approach to interviewing that, while still following a basic validated protocol, consciously accommodates itself to the natural diversity of human personality. As a further boon to cross-communication between behavioral science and law

enforcement personnel, this book uses the standard DSM-IV-TR diagnostic categories of psychology and psychiatry, avoiding some of the idiosyncratic – and occasionally, frankly crackpot – typologies that proliferate unsupportedly in the law enforcement field.

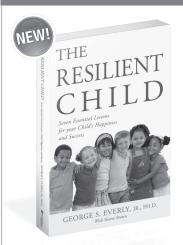
The book takes a user-friendly approach in following a uniform structure for each chapter, consisting of a description of the relevant personality disorder, preparing for the interview, conducting the interview, and key "do-and-don't" points. Each chapter also liberally employs conversational examples to illustrate key concepts, and includes a demonstrative case vignette. Separate chapters deal with the narcissistic personality, antisocial personality, psychopathic personality (not differentiated in the DSM), borderline personality, inadequate/immature personality (presumably the analog to the DSM avoidant/dependent personality), paranoid personality, and schizotypal personality. Appendices include a glossary and a conceptual model of personality traits and disorders.

My only squawk is, why stop with personality disorders? I would have liked to see the authors describe investigative interviewing techniques for depressed subjects, psychotic subjects, chemically dependent subjects, and so on; perhaps this will be another book. In the meantime, the present volume's many cooks have managed to produce a tasty, digestible, and nourishing broth of useful knowledge that can enhance the productivity of clinical and forensic investigations alike.

Corrections to Reviews in Issue Volume 12, Number 4: Consulting and Advising in Forensic Science: Empirical and Practical Guidelines was reviewed by Kendall Johnson. We apologize for the omission of the reviewers name. The Criminal Triad: Psychological Development of the Criminal Personality Type was reviewed by David F. Bjorklund.

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George S. Everly, Jr., PhD is one of the "founding fathers" of modern resiliency and stress management. He is on the faculties of The Johns Hopkins University School of Medicine and The Johns Hopkins University Bloomberg School of Public Health.

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