



## CDP Research Update -- March 29, 2012

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- Prolonged-release formulation of melatonin (Circadin) for the treatment of insomnia.
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- Links of Interest
- Research Tip of the Week: TextFixer

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<http://www.ncbi.nlm.nih.gov/pubmed/22441999?dopt=Abstract>

Neuromolecular Med. 2012 Mar 23. [Epub ahead of print]

### **Traumatic Brain Injury and Disturbed Sleep and Wakefulness.**

Baumann CR.

Source: Department of Neurology, University Hospital Zurich, Frauenklinikstrasse 26, 8091, Zurich, Switzerland, christian.baumann@usz.ch.

#### **Abstract**

Traumatic brain injury is a frequent condition worldwide, and sleep-wake disturbances often complicate the course after the injuring event. Current evidence suggests that the most common sleep-wake disturbances following traumatic brain injury include excessive daytime sleepiness and posttraumatic hypersomnia, that is, increased sleep need per 24 h. The neuromolecular basis of posttraumatic sleep

pressure enhancement is not entirely clear. First neuropathological and clinical studies suggest that impaired hypocretin (orexin) signalling might contribute to sleepiness, but direct or indirect traumatic injury also to other sleep-wake modulating systems in the brainstem and the mesencephalon is likely. Posttraumatic insomnia may be less common than posttraumatic sleepiness, but studies on its frequency revealed conflicting results. Furthermore, insomnia is often associated with psychiatric comorbidities, and some patients with posttraumatic disruption of their circadian rhythm may be misdiagnosed as insomnia patients. The pathophysiology of posttraumatic circadian sleep disorders remains elusive; however, there is some evidence that reduced evening melatonin production due to traumatic brain damage may cause disruption of circadian regulation of sleep and wakefulness.

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<http://www.ncbi.nlm.nih.gov/pubmed/22440458?dopt=Abstract>

Behav Res Ther. 2012 Feb 19;50(5):275-279. [Epub ahead of print]

### **Tones inferior to eye movements in the EMDR treatment of PTSD.**

van den Hout MA, Rijkeboer MM, Engelhard IM, Klugkist I, Hornsveld H, Toffolo MJ, Cath DC.

Source: Clinical and Health Psychology, Utrecht University, P.O. Box 80140, 3508 TC Utrecht, The Netherlands.

#### Abstract

Eye Movement Desensitization and Reprocessing (EMDR) is an effective treatment for posttraumatic stress disorder (PTSD). During EMDR, patients make eye movements (EMs) while recalling traumatic memories, but recently therapists have replaced EMs by alternating beep tones. There are no outcome studies on the effects of tones. In an earlier analogue study, tones were inferior to EMs in the reduction of vividness of aversive memories. In a first EMDR session, 12 PTSD patients recalled trauma memories in three conditions: recall only, recall + tones, and recall + EMs. Three competing hypotheses were tested: 1) EMs are as effective as tones and better than recall only, 2) EMs are better than tones and tones are as effective as recall only, and 3) EMs are better than tones and tones are better than recall only. The order of conditions was balanced, each condition was delivered twice, and decline in memory vividness and emotionality served as outcome measures. The data strongly support hypothesis 2 and 3 over 1: EMs outperformed tones while it remained unclear if tones add to recall only. The findings add to earlier considerations and earlier analogue findings suggesting that EMs are superior to tones and that replacing the former by the latter was premature.

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<http://www.ncbi.nlm.nih.gov/pubmed/22440076?dopt=Abstract>

Behav Ther. 2012 Jun;43(2):416-426. Epub 2011 Oct 14.

## **Relationship Distress in Partners of Combat Veterans: The Role of Partners' Perceptions of Posttraumatic Stress Symptoms.**

Renshaw KD, Caska CM.

Source: George Mason University.

### Abstract

Partners of combat veterans with posttraumatic stress disorder report elevated relationship and psychological distress, but little is known about the mechanisms by which such distress develops. In two separate samples, we examined partners' perceptions of veterans' PTSD symptoms, with a specific focus on the simultaneous associations of partners' distress with their perceptions of veterans' reexperiencing, withdrawal/numbing, and hyperarousal symptom clusters. The first sample consisted of 258 partners of Operation Enduring- and Iraqi Freedom-era veterans who completed questionnaires. The second sample consisted of 465 partners of Vietnam-era veterans who completed interviews as part of the National Vietnam Veterans Readjustment Study. In both samples, path analyses revealed that, when examined simultaneously, partners' perceptions of withdrawal/numbing symptoms were associated with greater distress, but perceptions of reexperiencing symptoms were unrelated to psychological distress and significantly associated with lower levels of relationship distress. Given the cross-sectional nature of the data in both samples, there are multiple plausible interpretations of the results. However, the pattern is consistent with an attributional model of partner distress, whereby partners are less distressed when symptoms are more overtly related to an uncontrollable mental illness. Potential clinical implications are discussed.

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<http://www.ncbi.nlm.nih.gov/pubmed/22440075?dopt=Abstract>

Behav Ther. 2012 Jun;43(2):407-415. Epub 2011 Oct 1.

## **Adaptive Disclosure: An Open Trial of a Novel Exposure-Based Intervention for Service Members With Combat-Related Psychological Stress Injuries.**

Gray MJ, Schorr Y, Nash W, Lebowitz L, Amidon A, Lansing A, Maglione M, Lang AJ, Litz BT.

Source: University of Wyoming.

### Abstract

We evaluated the preliminary effectiveness of a novel intervention that was developed to address combat stress injuries in active-duty military personnel. Adaptive disclosure (AD) is relatively brief to accommodate the busy schedules of active-duty service members while training for future deployments. Further, AD takes into account unique aspects of the phenomenology of military service in war in order

to address difficulties such as moral injury and traumatic loss that may not receive adequate and explicit attention by conventional treatments that primarily address fear-inducing life-threatening experiences and sequelae. In this program development and evaluation open trial, 44 marines received AD while in garrison. It was well tolerated and, despite the brief treatment duration, promoted significant reductions in PTSD, depression, negative posttraumatic appraisals, and was also associated with increases in posttraumatic growth.

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<http://www.ncbi.nlm.nih.gov/pubmed/22439741?dopt=Abstract>

Cogn Behav Ther. 2012 Mar 22. [Epub ahead of print]

### **Associations Between Psychological Factors and Nighttime/Daytime Symptomatology in Insomnia.**

Jansson-Fröjmark M, Harvey AG, Norell-Clarke A, Linton SJ.

Source: School of Law, Psychology, and Social Work, Örebro University , Örebro , Sweden.

#### Abstract

##### Purpose:

The aim of this study was to examine psychological factors in insomnia and the association between psychological mechanisms and nighttime and daytime symptoms.

##### Methods:

A cross-sectional examination in the general population was used. The study sample consisted of 1890 participants from the general population. The participants completed a survey on nighttime and daytime symptoms, health outcomes, and psychological factors.

##### Results:

Relative to poor and normal sleepers (NSs), the insomnia group had higher scores on worry, beliefs, physiologic arousal, monitoring/attentional bias, and safety behaviors than the other two groups, and the poor sleepers exhibited a similar pattern relative to the NSs. High total wake time was associated with more worry, physiologic arousal, and safety behaviors (26.3% variance), low sleep restoration with more worry, unhelpful beliefs, and monitoring/attentional bias (28.2% variance), and low sleep quality with higher scores on all the psychological mechanisms (35.8% variance). Elevated daytime symptoms were related to more unhelpful beliefs and monitoring/attentional bias (44.3% variance).

##### Conclusion:

The findings indicate that psychological factors are linked to nighttime and daytime symptomatology in insomnia.

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<http://www.ncbi.nlm.nih.gov/pubmed/22435955?dopt=Abstract>

J Clin Exp Neuropsychol. 2012 Mar 21. [Epub ahead of print]

**Changes in emotional empathy, affective responsivity, and behavior following severe traumatic brain injury.**

de Sousa A, McDonald S, Rushby J.

Source: School of Psychology , University of New South Wales , Sydney , NSW , Australia.

Abstract

This study was designed to examine the relationship between deficits in empathy, emotional responsivity, and social behavior in adults with severe traumatic brain injury (TBI). A total of 21 patients with severe TBI and 25 control participants viewed six film clips containing pleasant, unpleasant, and neutral content whilst facial muscle responses, skin conductance, and valence and arousal ratings were measured. Emotional empathy (the Balanced Emotional Empathy Scale, BEES: self-report) and changes in drive and control in social situations (The Current Behaviour Scale, CBS: relative report) were also assessed. In comparison to control participants, those in the TBI group reported less ability to empathize emotionally and had reduced facial responding to both pleasant and unpleasant films. They also exhibited lowered autonomic arousal, as well as abnormal ratings of valence and arousal, particularly to unpleasant films. Relative reported loss of emotional control was significantly associated with heightened empathy, while there was a trend to suggest that impaired drive (or motivation) may be related to lower levels of emotional empathy. The results represent the first to suggest that level of emotional empathy post traumatic brain injury may be associated with behavioral manifestations of disorders of drive and control. This study is a component of the primary author's doctoral dissertation conducted under the supervision of the second author. The authors wish to thank all who participated in the study, including the people with traumatic brain injuries, their families, and community controls who gave willingly of their time. The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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<http://www.sciencedirect.com/science/article/pii/S0092656612000530>

**Stoicism and Sensation Seeking: Male Vulnerabilities for the Acquired Capability for Suicide.**

Tracy K. Witte, Kathryn H. Gordon, Phillip N. Smith, Kimberly A. Van Orden

Journal of Research in Personality

Available online 23 March 2012

Our aim was to investigate two personality traits (i.e., stoicism and sensation seeking) that may account for well-established gender differences in suicide, within the framework of the interpersonal theory of

suicide. This theory proposes that acquired capability for suicide, a construct comprised of pain insensitivity and fearlessness about death, explains gender differences in suicide. Across two samples of undergraduates (N = 185 and N = 363), men demonstrated significantly greater levels of both facets of acquired capability than women. Further, we found that stoicism accounted for the relationship between gender and pain insensitivity, and sensation seeking accounted for the relationship between gender and fearlessness about death. Thus, personality may be one psychological mechanism accounting for gender differences in suicidal behavior.

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<http://www.springerlink.com/content/k727659116q26947/>

### **Noncredible Performance in Mild Traumatic Brain Injury.**

Russell D. Pella, B. D. Hill, Ashvind N. Singh, Jill S. Hayes and Wm. Drew Gouvier

Detection of Malingering during Head Injury Litigation (Book Title)

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According to the Centers for Disease Control and Prevention approximately 1.4 million Americans suffer some form of Traumatic Brain Injury (TBI) each year (Centers for Disease Control & Prevention, 1999; Langlois, Rutland-Brown, & Thomas, 2004). Such injuries occur by falling (28%), involvement in motor vehicle accidents (MVA) (20%), being struck by or against objects (including vehicles) (19%), and physical assault (11%) (Langlois et al.). As of the millennium's closing in the USA, TBI resulted in approximately 50,000 deaths, 235,000 hospitalizations, and 1.1 million emergency room visits per annum. As a result of TBI, at least 5.3 million Americans currently need long-term assistance performing activities of daily living (Thurman, Alverson, Dunn, Guerrero, & Sniezek, 1999), often requiring substantial community, financial, and governmental resources. For instance, estimates of direct medical costs and other indirect costs (e.g., loss of work productivity, etc.) total well over \$60 billion in the United States annually (Finkelstein, Corso, & Miller, 2006). Mild TBI (MTBI) accounts for 80% of all TBI cases (Sohlberg & Mateer, 2001) and has also been dubbed the "signature wound of the war on terrorism" in military personnel (Association of the United States Army, 2008). There is a reported high rate of MTBI in Operation Enduring Freedom/Operation Iraqi Freedom veterans, ranging from 12 to 15% (Hoge et al., 2008; Schneiderman, Braver, & Kang, 2008). However, the number of individuals who suffer a MTBI and fail to present to an emergency medical department or do not identify themselves on the battlefield remains unknown and understudied.

See also: **Distinguishing Genuine from Malingered Posttraumatic Stress Disorder in Head Injury Litigation** (<http://www.springerlink.com/content/q163607381557n14/>)

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<http://escholarship.umassmed.edu/cgi/viewcontent.cgi?article=1050&context=pib> (full text)

**Psychiatry Issue Brief: Brain Injury Resources.**

Colleen E. McKay, MA, CAGS & Meghan E. Heffernan, BA

Center for Mental Health Services Research, University of Massachusetts Medical School

The Berkeley Electronic Press, 2012

Brain injury, occurring when physical trauma causes brain damage, either closed-head or penetrating, contributes to one third of all injury-related deaths annually and places approximately 275,000 people in the hospital each year (Faul, Xu, Wald, Coronado, 2010; Center for Disease Control and Prevention, 2012). Approximately 1.7 million people in the US sustain a traumatic brain injury (TBI) yearly (Faul, et al, 2010). It is estimated that TBI related medical costs, both direct and indirect, totaled \$76.5 billion dollars in 2010 (Center for Disease Control and Prevention, 2012).

Amongst the veteran population, TBI is often associated with psychological difficulty and increased risk of substance abuse (Department of Veterans Affairs). More than 203,019 individuals in the US forces had sustained TBI from combat and non-combat related causes (Defense and Veterans Brain Injury Center, 2012). This is approximately a 26% increase in medically diagnosed cases of US soldiers since 2000 (Rand, 2008). Many of these soldiers suffer from deficits in cognitive and motor functions, as well as emotional difficulties, plaguing these persons with tremendous hardships and frustrations (Forrest, Schwam, & Cohen, 2002). These deficits commonly leave patients unable to hold employment or function properly in social surroundings; in turn, incurring serious social and economic costs to both the patients and relatives.

More troubling, individuals with TBI may receive improper or no treatment, despite self-reports of persisting deficits post-injury (Huebner, Johnson, Miller Bennett, & Schneck, 2003). While some community-based rehabilitative supports exist (e.g. vocational rehabilitation services, or case management), these programs are not widely available for persons with TBI in all communities. In all, there is an inadequate service array to support individuals with brain injuries.

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<http://www.springerlink.com/content/y12m3l168856g073/>

**The Imperative for Social Competency Prediction.**

Robert Hubal

Social Computing, Behavioral - Cultural Modeling and Prediction (Book Title)

Lecture Notes in Computer Science (Book Series Title)

<http://www.amazon.com/Social-Computing-Behavioral-Cultural-Modeling-Prediction/dp/3642196551/>



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Some military personnel returning from deployment show social competency deficits: They act impulsively and make risky decisions, misinterpret interaction cues, experience difficulties with personal relationships, and adopt high-risk behaviors. These adverse social skills directly influence, among other important variables, psychological health and quality of life. Social skills deficits are not just a military concern; for instance, at-risk adolescents and reintegrating prisoners must also learn to demonstrate social competence. Meanwhile, today's screening is limited in its ability to assess current—and predict future—social competency; typical neurocognitive assessment is not designed to assess social competence in realistic situations. The author proposes a tool to improve screening by identifying social competency deficits through assessment of behavior in simulated social situations. This is important not only to more accurately assess adverse behaviors, but also to predict future behaviors and their causes, to focus intervention to address social competency deficits before adverse behaviors are ever exhibited.

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[http://cir.usc.edu/wp-content/uploads/2011/09/CIR-Policy-Brief\\_Mar2012\\_K.Mulrooney-D.Williams.pdf](http://cir.usc.edu/wp-content/uploads/2011/09/CIR-Policy-Brief_Mar2012_K.Mulrooney-D.Williams.pdf)  
(full text)

### **Increasing Understanding of Infants and Young Children in Military Families Through Focused Research.**

Kathleen Mulrooney, Dorinda Silver Williams

USC School of Social Work, Center for Innovation and Research on Veterans & Military Families

March 2012

Over the past decade, servicemembers and their families have endured multiple and extended deployments as part of the nation's ongoing involvement in Operation Enduring Freedom (OEF) / Operation Iraqi Freedom (OIF) (Shanker, 2008). For many of these families, the separations and uncertainties of wartime deployment have been overlaid with injury and loss. As of July 2010, more than 71,000 U.S. service members had been wounded during their OEF/OIF deployment; and approximately 7,000 servicemembers had been killed (icasualties.org, 2010). Psychological injuries such as posttraumatic stress disorder (PTSD) and other mental health issues have also been prevalent among combat-deployed servicemembers. In fact, the estimated rates of PTSD appear higher for combat-deployed servicemembers than in the general U.S. population (U.S. Department of Veterans Affairs, 2007). Psychological distress may be overlaid with other troubling conditions such as traumatic brain injury (TBI) (American Psychological Association, Presidential Task Force on Military Deployment Services for Youth, Families and Service Members, 2007; Kennedy et al., 2007; Schell & Marshall, 2008; Vasterling et al., 2006); physical injury (Grieger et al., 2006); substance use (Dedert et al., 2009); anger or hostility (Jakupcak et al., 2007); and chronic pain (Kline et al., 2010). This combination of physical and mental health issues impact not only on the service member themselves but their family relationships as well.

There has been significant concern over the impact of these extended and repeated combat deployments on families (American Psychological Association, 2007; Chartrand & Siegel, 2007; McFarlane, 2009). Although military families are largely recognized as a robust and resilient population (Cozza, Chun, & Polo, 2005), the extraordinary stressors associated with combat deployment-related separation, physical injury, psychological injury, and uncertainty may place even the strongest families at risk for destabilization or compromised functioning.

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[http://034fb4c.netsolhost.com/images/Handbook\\_of\\_Counseling\\_Military\\_Couples\\_Rheem,\\_Woolley,\\_Weissman.pdf](http://034fb4c.netsolhost.com/images/Handbook_of_Counseling_Military_Couples_Rheem,_Woolley,_Weissman.pdf) (full text)

**Using Emotionally Focused Couples Therapy With Military Couples.** (book chapter)

KATHRYN D. RHEEM, SCOTT R. WOOLLEY, and NEIL WEISSMAN

Handbook of Counseling Military Couples (book title)

<http://www.amazon.com/Handbook-Counseling-Military-Couples-Therapy/dp/0415887305>

The impacts of deployment and combat-related trauma have once again been pushed to the fore due to the current conflicts in Iraq and Afghanistan. Similar to shell shock from the World Wars and combat fatigue from the Vietnam War, combat-related psychological symptoms have now impacted 31–38% of our postcombat deployed military service members (Munsey, 2007). Of those with psychological symptoms, 17% are diagnosed with posttraumatic stress disorder (PTSD), major depression, or generalized anxiety (Hoge et al., 2004). Typically, the military service member with PTSD or combat stress has been treated individually (APA Presidential Task Force, 2007), despite the known negative relational impacts of deployment and combat stress on the service member and the individual's spouse and children (Sherman, Zanotti, & Jones, 2005). Just as deployment and combat stress are associated with mental health disorders such as PTSD, depression, anxiety, suicidality, and substance abuse (Hoge, Terhakopian, Castro, Messer, & Engel, 2007), marital distress often increases (Basham, 2008). Emotionally focused therapy (EFT; Johnson, 2004) for couples, with its focus on emotions as the leading elements in couple dynamics and with its ability to treat individual symptomology within a relational context, is particularly well suited for military couples facing the echoes of battle and the distress resulting from deployment and combat stress (Johnson, 2002; Johnson & Rheem, 2006).

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<http://www.sciencedirect.com/science/article/pii/S0306460312000846>

**Do normative perceptions of drinking relate to alcohol use in U.S. Military Veterans presenting to primary care?**

Arianna Aldridge-Gerry, Michael A. Cucciare, Sharfun Ghaus, Nicole Ketroser

Addictive Behaviors

Available online 28 February 2012

### Objective

The current cross sectional study sought to examine whether perceived social normative beliefs are associated with indicators of alcohol use in a sample of alcohol misusing veterans.

### Method

A sample of 107 U.S. Military Veterans presenting to primary care that screened positive for alcohol misuse on the Alcohol Use Disorders Identification Test-Consumption Items (AUDIT-C) was recruited. Assessment measures were used to examine social normative beliefs and alcohol-related concerns as they relate to indicators of alcohol use at baseline.

### Results

Our findings indicate mixed support for our two hypotheses in that perceived descriptive norms were associated with alcohol use indicators in the predicted direction; however, this was not the case for alcohol-related concerns. For perceived norms, we found that higher quantity beliefs were significantly related to greater alcohol consumption on a drinking day ( $p < .01$ ), increased likelihood of dependence ( $p < .01$ ), and frequency beliefs were significantly related to total number of drinking days ( $p < .01$ ). Findings for alcohol-related concerns emerged contrary to our hypothesis, with results depicting increased alcohol-related concerns associated with higher alcohol consumption across indicators of use ( $ps < .01$ ).

### Summary

Findings of the current study suggest that social normative beliefs, specifically misperceptions about descriptive norms, are significantly associated with alcohol consumption in a sample of alcohol misusing veterans presenting to primary care.

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<http://onlinelibrary.wiley.com/doi/10.1111/j.1552-6909.2012.01346.x/abstract>

### **Mentors Offering Maternal Support: A Support Intervention for Military Mothers.**

Karen L. Weis, Teresa W. Ryan

Journal of Obstetric, Gynecologic, & Neonatal Nursing

Volume 41, Issue 2, pages 303–314, March/April 2012

### Objective

To evaluate the effectiveness of the Mentors Offering Maternal Support (MOMS) program to promote maternal fetal attachment, maternal adaptation to pregnancy, self-esteem, and perceived community support in women within a military environment.

### Design

A randomized, controlled, repeated measured pilot study compared two groups of pregnant military

wives, a control group receiving standard prenatal care and an intervention group receiving a structured eight-session MOMS program.

#### Setting

The study was conducted at two Air Force installations in Florida having joint (Air Force, Army, and Navy) operations and high deployment requirements.

#### Participants

Sixty-five military wives in their first trimester of pregnancy (control group, n = 36 and intervention group, n = 29) completed all aspects of the study.

#### Methods

Women randomized to the MOMS program received eight structured classes starting in the first trimester of pregnancy and occurring every other week until the third trimester. Outcome measures were obtained in each trimester. The women in the control group received usual prenatal care.

#### Results

No statistically significant differences were found between the two groups for any of the outcome variables. The interaction of the amount of contact the women had with their deployed husbands and group assignment was statistically different for two variables, the Relationship with Husband Scale and the Rosenberg Self-Esteem Inventory.

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<http://www.sciencedirect.com/science/article/pii/S0887618512000333>

#### **Non-adherence and non-response in the treatment of anxiety disorders.**

Journal of Anxiety Disorders

Available online 13 February 2012

Among the best established treatments for anxiety disorders are cognitive-behavioral interventions and serotonin reuptake inhibitors. Although clinically useful, these therapies are far from universally efficacious; some patients are unable to complete treatment, and many treatment completers fail to achieve clinically significant improvement. A review of meta-analyses on the treatment of anxiety disorders reveals that about a fifth of patients drop out prematurely and a third of treatment completers are classified as non-responders. In this article we examine the predictors of, and potential solutions for, the problems of treatment non-adherence and non-response to cognitive-behavioral and serotonergic treatments of adult anxiety disorders. Despite decades of research, few reliable predictors have been identified, and no predictor has been consistently supported in the literature. However, there is suggestive evidence that risk of premature dropout is associated with low treatment motivation, side effects, and practical barriers to attending sessions. There is also suggestive evidence that poor response is associated with severe pretreatment psychopathology and comorbidity, as well as high expressed

emotion in the patient's family environment. Methods for better estimating treatment prognosis are proposed and possible directions for improving treatment outcome are discussed.

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<http://onlinelibrary.wiley.com/doi/10.1002/da.21889/abstract>

**The Dissociative Subtype of Posttraumatic Stress Disorder: Rationale, Clinical and Neurobiological Evidence, and Implications.**

Lanius, Ruth A.; Brand, Bethany; Vermetten, Eric; Frewen, Paul A.; Spiegel, David

Depression and Anxiety

Article first published online: 16 MAR 2012

Background

Clinical and neurobiological evidence for a dissociative subtype of posttraumatic stress disorder (PTSD) has recently been documented. A dissociative subtype of PTSD is being considered for inclusion in the forthcoming Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (DSM-5) to address the symptoms of depersonalization and derealization found among a subset of patients with PTSD. This article reviews research related to the dissociative subtype including antecedent, concurrent, and predictive validators as well as the rationale for recommending the dissociative subtype.

Methods

The relevant literature pertaining to the dissociative subtype of PTSD was reviewed.

Results

Latent class analyses point toward a specific subtype of PTSD consisting of symptoms of depersonalization and derealization in both veteran and civilian samples of PTSD. Compared to individuals with PTSD, those with the dissociative subtype of PTSD also exhibit a different pattern of neurobiological response to symptom provocation as well as a differential response to current cognitive behavioral treatment designed for PTSD.

Conclusions

We recommend that consideration be given to adding a dissociative subtype of PTSD in the revision of the DSM. This facilitates more accurate analysis of different phenotypes of PTSD, assist in treatment planning that is informed by considering the degree of patients' dissociativity, will improve treatment outcome, and will lead to much-needed research about the prevalence, symptomatology, neurobiology, and treatment of individuals with the dissociative subtype of PTSD.

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<http://www.ncbi.nlm.nih.gov/pubmed/22447622?dopt=Abstract>

Depress Anxiety. 2012 Mar 23. doi: 10.1002/da.21926. [Epub ahead of print]

## **Statistical Support for Subtypes in Posttraumatic Stress Disorder: The How and Why of Subtype Analysis.**

Dalenberg CJ, Glaser D, Alhassoon OM.

Source: Clinical Psychology Ph.D. Program, California School of Professional Psychology, San Diego,, California.

### Abstract

A number of researchers have argued for the existence of different subtypes of posttraumatic stress disorder (PTSD). In the current paper we present criteria by which to assess these putative subtypes, clarify potential pitfalls of the statistical methods employed to determine them, and propose alternative methods for such determinations. Specifically, three PTSD subtypes are examined: (1) complex PTSD, (2) externalizing/internalizing PTSD, and (3) dissociative/nondissociative PTSD. In addition, three criteria are proposed for subtype evaluation, these are the need for (1) reliability and clarity of definition, (2) distinctions between subtypes either structurally or by mechanism, and (3) clinical meaningfulness. Common statistical evidence for subtyping, such as statistical mean difference and cluster analysis, are presented and evaluated. Finally, more robust statistical methods are suggested for future research on PTSD subtyping.

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<http://www.ncbi.nlm.nih.gov/pubmed/22445936?dopt=Abstract>

J Behav Ther Exp Psychiatry. 2012 Mar 1;43(3):947-951. [Epub ahead of print]

## **The contribution of threat probability estimates to reexperiencing symptoms: A prospective analog study.**

Regambal MJ, Alden LE.

Source: Department of Psychology, University of British Columbia, 2136 West Mall, V6T 1Z4, Vancouver, British Columbia, Canada.

### Abstract

#### BACKGROUND AND OBJECTIVES:

Individuals with posttraumatic stress disorder (PTSD) are hypothesized to have a "sense of current threat." Perceived threat from the environment (i.e., external threat), can lead to overestimating the probability of the traumatic event reoccurring (Ehlers & Clark, 2000). However, it is unclear if external threat judgments are a pre-existing vulnerability for PTSD or a consequence of trauma exposure. We used trauma analog methodology to prospectively measure probability estimates of a traumatic event,

and investigate how these estimates were related to cognitive processes implicated in PTSD development.

#### METHODS:

151 participants estimated the probability of being in car-accident related situations, watched a movie of a car accident victim, and then completed a measure of data-driven processing during the movie. One week later, participants re-estimated the probabilities, and completed measures of reexperiencing symptoms and symptom appraisals/reactions.

#### RESULTS:

Path analysis revealed that higher pre-existing probability estimates predicted greater data-driven processing which was associated with negative appraisals and responses to intrusions. Furthermore, lower pre-existing probability estimates and negative responses to intrusions were both associated with a greater change in probability estimates. Reexperiencing symptoms were predicted by negative responses to intrusions and, to a lesser degree, by greater changes in probability estimates.

#### LIMITATIONS:

The undergraduate student sample may not be representative of the general public. The reexperiencing symptoms are less severe than what would be found in a trauma sample.

#### CONCLUSIONS:

Threat estimates present both a vulnerability and a consequence of exposure to a distressing event. Furthermore, changes in these estimates are associated with cognitive processes implicated in PTSD.

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<http://www.plosbiology.org/article/info%3Adoi%2F10.1371%2Fjournal.pbio.1001289> (full text)

#### **Neuroscience, Ethics, and National Security: The State of the Art.**

Tennison MN , Moreno JD

PLoS Biology

Published: March 20, 2012

National security organizations in the United States, including the armed services and the intelligence community, have developed a close relationship with the scientific establishment. The latest technology often fuels warfighting and counter-intelligence capacities, providing the tactical advantages thought necessary to maintain geopolitical dominance and national security. Neuroscience has emerged as a prominent focus within this milieu, annually receiving hundreds of millions of Department of Defense dollars. Its role in national security operations raises ethical issues that need to be addressed to ensure the pragmatic synthesis of ethical accountability and national security.

See: **Ethical Considerations of Military-Funded Neuroscience** (Science Daily)

<http://www.sciencedaily.com/releases/2012/03/120320195800.htm>

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<http://www.ncbi.nlm.nih.gov/pubmed/20713494?dopt=Abstract>

J Hist Med Allied Sci. 2012 Jan;67(1):94-119. Epub 2010 Aug 16.

**Shell shock, trauma, and the First World War: the making of a diagnosis and its histories.**

Loughran T.

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Abstract

During the First World War, thousands of soldiers were treated for "shell shock," a condition which encompassed a range of physical and psychological symptoms. Shell shock has most often been located within a "genealogy of trauma," and identified as an important marker in the gradual recognition of the psychological afflictions caused by combat. In recent years, shell shock has increasingly been viewed as a powerful emblem of the suffering of war. This article, which focuses on Britain, extends scholarly analyses which question characterizations of shell shock as an early form of post-traumatic stress disorder. It also considers some of the methodological problems raised by recasting shell shock as a wartime medical construction rather than an essentially timeless manifestation of trauma. It argues that shell shock must be analyzed as a diagnosis shaped by a specific set of contemporary concerns, knowledges, and practices. Such an analysis challenges accepted understandings of what shell shock "meant" in the First World War, and also offers new perspectives on the role of shell shock in shaping the emergence of psychology and psychiatry in the early part of the twentieth century. The article also considers what relation, if any, might exist between intellectual and other histories, literary approaches, and perceptions of trauma as timeless and unchanging.

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<http://www.ncbi.nlm.nih.gov/pubmed/22449084?dopt=Abstract>

Psychol Serv. 2012 Feb;9(1):16-25.

**Prolonged exposure therapy for combat-related posttraumatic stress disorder: Comparing outcomes for veterans of different wars.**

Yoder M, Tuerk PW, Price M, Grubaugh AL, Strachan M, Myrick H, Acierno R.

Source: Mental Health Service, Ralph H. Johnson VA Medical Center.



## Abstract

There is significant support for exposure therapy as an effective treatment for posttraumatic stress disorder (PTSD) across a variety of populations, including veterans; however, there is little empirical information regarding how veterans of different war theaters respond to exposure therapy. Accordingly, questions remain regarding therapy effectiveness for treatment of PTSD for veterans of different eras. Such questions have important implications for the dissemination of evidence based treatments, treatment development, and policy. The current study compared treatment outcomes across 112 veterans of the Vietnam War, the first Persian Gulf War, and the wars in Afghanistan and Iraq. All subjects were diagnosed with PTSD and enrolled in Prolonged Exposure (PE) treatment. Veterans from all three groups showed significant improvement in PTSD symptoms, with veterans from Vietnam and Afghanistan/Iraq responding similarly to treatment. Persian Gulf veterans did not respond to treatment at the same rate or to the same degree as veterans from the other two eras. Questions and issues regarding the effectiveness of evidence based treatment for veterans from different eras are discussed. (PsycINFO Database Record (c) 2012 APA, all rights reserved).

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<http://www.ncbi.nlm.nih.gov/pubmed/22448333?dopt=Abstract>

Rehabil Res Pract. 2012;2012:625621. Epub 2012 Feb 7.

### **Working with mild traumatic brain injury: voices from the field.**

Buck PW, Laster RG, Sagrati JS, Kirzner RS.

Source: Graduate Social Work Department, West Chester University, West Chester, PA 19383, USA.

## Abstract

Mild traumatic brain injury (mTBI), also known as concussion, is an emerging public health issue in the United States. The estimated annual 1.2 million individuals who sustain this injury face a range of cognitive, psychological, and physical consequences for which rehabilitation protocols are being developed and implemented. On the frontlines of this developing area of rehabilitation work are professionals in a range of therapeutic settings whose practice wisdom has yet to be shared in the professional literature. This qualitative study aimed to fill this gap by exploring the experiences and insights of rehabilitation professionals serving mTBI patients in outpatient, civilian settings. An analysis of the qualitative data revealed five themes common in mTBI work, providing an in-depth look at this often challenging field of rehabilitation.

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<http://www.ncbi.nlm.nih.gov/pubmed/22446155?dopt=Abstract>

Arch Phys Med Rehabil. 2012 Mar 22. [Epub ahead of print]

## **Affect recognition, empathy and dysosmia following traumatic brain injury.**

Neumann D, Zupan B, Babbage D, Radnovich A, Tomita M, Hammond F, Willer B.

### Source

Carolinas Rehabilitation, Department of Physical Medicine and Rehabilitation, Charlotte, NC; Indiana University School of Medicine, Department of Physical Medicine and Rehabilitation.

### Abstract

#### OBJECTIVE:

To investigate if olfaction is associated with affect recognition and empathy deficits after Traumatic Brain Injury (TBI). Prior research has shown that TBI often leads to loss of smell. We hypothesized a relationship with emotion perception because the neural substrates of the olfactory system overlap with the ventral circuitry of the orbital frontal cortex, which play a critical role in affective responses such as empathy.

#### DESIGN:

Comparative study investigating differences between participants with TBI who had impaired olfaction (dysosmia) to those with normal olfaction (normosmia).

#### SETTING:

Post-acute rehabilitation facilities in the United States, Canada, and New Zealand.

#### PARTICIPANTS:

Participants in the current study were a convenience sample of 106 adults with moderate to severe TBI who were tested for olfactory function as part of a larger, related study on affect recognition. On average, participants were 11.5 years post-injury.

#### INTERVENTIONS:

Not applicable.

#### MAIN OUTCOME MEASURES:

Olfaction (BSIT); facial affect recognition (DANVA2-Adult Faces; AF); vocal affect recognition (DANVA2-Adult Paralanguage; AP); emotional inference (EIST); and empathy (IRI).

#### RESULTS:

56% participants were dysosmic and only 36% of these participants were aware of their deficit. Participants with dysosmia performed significantly poorer on the DANVA-AF ( $p=.003$ ), DANVA-AP ( $p=.007$ ), EIST ( $p=.016$ ), and IRI ( $p=.0125$ ). Medium effect sizes were found for all measures. Dysosmia had a sensitivity value of 86.4% for detecting facial affect recognition impairments and 67.8 % for vocal affect recognition impairments.

#### CONCLUSION:

This study shows that olfactory deficits may be indicative of affect recognition impairments and reduced

empathy. Early knowledge of affect recognition and empathy deficits would be valuable so that treatment could be implemented pre-discharge.

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<http://www.ncbi.nlm.nih.gov/pubmed/22431700?dopt=Abstract>

BMJ Open. 2012 Mar 18;2(2):e000312. Print 2012.

**A case-control study examining whether neurological deficits and PTSD in combat veterans are related to episodes of mild TBI.**

Ruff RL, Riechers RG 2nd, Wang XF, Piero T, Ruff SS.

Source: Neurology Service, Louis Stokes Cleveland Department of Veterans Affairs Medical Center, Cleveland, Ohio, USA.

Abstract

BACKGROUND:

Mild traumatic brain injury (mTBI) is a common injury among military personnel serving in Iraq or Afghanistan. The impact of repeated episodes of combat mTBI is unknown.

OBJECTIVE:

To evaluate relationships among mTBI, post-traumatic stress disorder (PTSD) and neurological deficits (NDs) in US veterans who served in Iraq or Afghanistan.

METHODS:

This was a case-control study. From 2091 veterans screened for traumatic brain injury, the authors studied 126 who sustained mTBI with one or more episodes of loss of consciousness (LOC) in combat. Comparison groups: 21 combat veterans who had definite or possible episodes of mTBI without LOC and 21 veterans who sustained mTBI with LOC as civilians.

RESULTS:

Among combat veterans with mTBI, 52% had NDs, 66% had PTSD and 50% had PTSD and an ND. Impaired olfaction was the most common ND, found in 65 veterans. The prevalence of an ND or PTSD correlated with the number of mTBI exposures with LOC. The prevalence of an ND or PTSD was >90% for more than five episodes of LOC. Severity of PTSD and impairment of olfaction increased with number of LOC episodes. The prevalence of an ND for the 34 combat veterans with one episode of LOC (4/34=11.8%) was similar to that of the 21 veterans of similar age and educational background who sustained civilian mTBI with one episode of LOC (2/21=9.5%, p-NS).

## CONCLUSIONS:

Impaired olfaction was the most frequently recognised ND. Repeated episodes of combat mTBI were associated with increased likelihood of PTSD and an ND. Combat setting may not increase the likelihood of an ND. Two possible connections between mTBI and PTSD are (1) that circumstances leading to combat mTBI likely involve severe psychological trauma and (2) that altered cerebral functioning following mTBI may increase the likelihood that a traumatic event results in PTSD.

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<http://www.ncbi.nlm.nih.gov/pubmed/21873326?dopt=Abstract>

Arch Clin Neuropsychol. 2011 Dec;26(8):718-27. Epub 2011 Aug 25.

### **Utility of the mild brain injury atypical symptoms scale as a screening measure for symptom over-reporting in operation enduring freedom/operation iraqi freedom service members with post-concussive complaints.**

Cooper DB, Nelson L, Armistead-Jehle P, Bowles AO.

Source: Traumatic Brain Injury Service, Department of Orthopedics and Rehabilitation, Brooke Army Medical Center, Fort Sam Houston, TX 78234–6200, USA. douglas.b.cooper@us.army.mil

#### Abstract

Evaluation of post-deployment conditions such as post-concussive syndrome (PCS) and posttraumatic stress disorder (PTSD) frequently relies upon brief, self-report checklists which are face valid and highly susceptible to potential symptom validity issues such as symptom exaggeration. We investigated the psychometric properties of a 5-item measure of symptom exaggeration (mild brain injury atypical symptoms [mBIAS] scale) embedded in commonly used PCS and PTSD screening instruments in a sample of 403 patients seen in a brain injury clinic at a large military medical center. Exploratory factor analysis, examining measures of posttraumatic stress, post-concussive symptoms, and symptom over-reporting revealed a 6-factor model with the mBIAS scale items representing a unique factor. Analysis of psychometric properties demonstrated that a score of 8 on the mBIAS was optimal for the detection of symptom over-reporting (sensitivity = 0.94, specificity = 0.92) and appears to be the most favorable cut score for interpretive use. The findings provide a strong initial support for the use of the mBIAS in post-deployment populations.

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<http://www.ncbi.nlm.nih.gov/pubmed/22431135?dopt=Abstract>

### **Negative Self-Appraisals and Suicidal Behavior Among Trauma Victims Experiencing PTSD Symptoms: The Mediating Role of Defeat and Entrapment.**

Depress Anxiety. 2012 Mar 16. doi: 10.1002/da.21917. [Epub ahead of print]

Maria Panagioti, Gooding P, Taylor PJ, Tarrier N.

Source: School of Psychological Sciences, University of Manchester, United Kingdom.

Abstract

**BACKGROUND:**

A considerable body of literature has shown a strong association between posttraumatic stress disorder (PTSD) and suicidal behavior but only a limited number of studies have investigated the putative psychological mechanisms underlying suicidal behavior in PTSD. Based on a recent theoretical model of suicide, the Schematic Appraisals Model, the current study aimed to examine whether perceptions of defeat and entrapment mediated the effects of three types of negative self-appraisals (emotion coping, problem solving, and social support) on suicidal behavior among individuals experiencing PTSD symptoms in the past month.

**METHODS:**

The sample comprised 56 individuals who had been previously exposed to a traumatic event and reported at least one PTSD symptom in the past month (confirmed through the Posttraumatic Diagnostic Scale). The mediational analyses were conducted using a nonparametric, bootstrapping method.

**RESULTS:**

The results showed that defeat and entrapment fully mediated the effect of all three types of self-appraisals on suicidal behavior. When controlling for PTSD symptom severity, defeat and entrapment continued to mediate fully the effect of two types of self-appraisals, namely the perceived ability to control negative emotions (emotion coping) and the perceived ability to cope with difficult situations/problems (problem solving) on suicidal behavior.

**CONCLUSIONS:**

The current findings provide support for the Schematic Appraisals Model of Suicide and suggest that both specific types of negative self-appraisals and general perceptions of defeat and entrapment are strongly related to suicidal behavior in those with PTSD. The findings have important clinical implications.

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<http://www.ncbi.nlm.nih.gov/pubmed/22431063?dopt=Abstract>

Depress Anxiety. 2012 Mar 16:1-8. doi: 10.1002/da.21889. [Epub ahead of print]

**The Dissociative Subtype of Posttraumatic Stress Disorder: Rational, Clinical and Neurobiological Evidence, and Implications.**

Lanius RA, Brand B, Vermetten E, Frewen PA, Spiegel D.

Source: The University of Western Ontario, London, Ontario, Canada.

Abstract

**BACKGROUND:**

Clinical and neurobiological evidence for a dissociative subtype of posttraumatic stress disorder (PTSD) has recently been documented. A dissociative subtype of PTSD is being considered for inclusion in the forthcoming Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (DSM-5) to address the symptoms of depersonalization and derealization found among a subset of patients with PTSD. This article reviews research related to the dissociative subtype including antecedent, concurrent, and predictive validators as well as the rationale for recommending the dissociative subtype.

**METHODS:**

The relevant literature pertaining to the dissociative subtype of PTSD was reviewed.

**RESULTS:**

Latent class analyses point toward a specific subtype of PTSD consisting of symptoms of depersonalization and derealization in both veteran and civilian samples of PTSD. Compared to individuals with PTSD, those with the dissociative subtype of PTSD also exhibit a different pattern of neurobiological response to symptom provocation as well as a differential response to current cognitive behavioral treatment designed for PTSD.

**CONCLUSIONS:**

We recommend that consideration be given to adding a dissociative subtype of PTSD in the revision of the DSM. This facilitates more accurate analysis of different phenotypes of PTSD, assist in treatment planning that is informed by considering the degree of patients' dissociativity, will improve treatment outcome, and will lead to much-needed research about the prevalence, symptomatology, neurobiology, and treatment of individuals with the dissociative subtype of PTSD.

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<http://www.ncbi.nlm.nih.gov/pubmed/22426496?dopt=Abstract>

Neurosci Res. 2012 Mar 16. [Epub ahead of print]

**Conditioned fear stress combined with single-prolonged stress: A new PTSD mouse model.**

Wang H, Zuo D, He B, Qiao F, Zhao M, Wu Y.

Source: Department of Pharmacology, Shenyang Pharmaceutical University, Mailbox 41, Wenhua Road 103, Shenyang, 110016, China.

## Abstract

There are still some defects in current single-prolonged stress (SPS) model and conditioned fear (CF) stress model of post-traumatic stress disorder (PTSD). The purpose of this study is to evaluate a novel mouse model of PTSD. Male KM mice suffered the double stresses-SPS and CF. After incubation time, the novel model exhibited the PTSD-like behaviors: sensitive fear and conditioned fear, low activities and defects in novel object recognition abilities. The apoptosis in the hippocampus was significantly increased, which was induced by the double stresses and further caused the synaptic structure damages in the hippocampus. The electron microscopy analysis further proved the synaptic losses and neuronal impairments in the hippocampus. Our results indicated this combined stresses mouse model was better than the SPS model and CF model. In addition, in order to further verify this model, paroxetine was administered after the double stresses. The results showed that paroxetine administration reduced PTSD-like behaviors, hippocampal apoptosis and structure damages. We conclude that this mouse model is novel and more predictably mimicked the clinical characteristics of PTSD, and this model can be further used for investigating the mechanisms of PTSD and screening effective therapeutics agents.

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<http://www.ncbi.nlm.nih.gov/pubmed/22424296?dopt=Abstract>

Memory. 2012 Mar 16. [Epub ahead of print]

### **The impact of perceived self-efficacy on memory for aversive experiences.**

Brown AD, Joscelyne A, Dorfman ML, Marmar CR, Bryant RA.

Source: Department of Psychiatry , New York University School of Medicine , New York , NY , USA.

## Abstract

Self-efficacy is a key construct underlying healthy functioning and emotional well-being. Perceptions of uncontrollability, unpredictability, and low self-efficacy are consistently associated with negative mental health outcomes, such as post-traumatic stress disorder (PTSD). To test the causal relation between perceived coping self-efficacy and stress responses we employed a trauma film paradigm in which college students (N=33) viewed a graphic film of the aftermath of a motor vehicle accident following a high (HSE) or low self-efficacy (LSE) induction. Participants were tested for intrusions, distress, and memory recall for the film over the following 24 hours. LSE participants recalled more central details than HSE participants. Further, HSE participants reported fewer negative intrusions immediately following the film and at 24 hours. These findings suggest that strategies that increase perceived coping self-efficacy may reduce intrusive recollections of an aversive event, and also reduce the attentional bias associated with remembering aversive stimuli.

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<http://www.ncbi.nlm.nih.gov/pubmed/22423551?dopt=Abstract>

Clin EEG Neurosci. 2012 Jan;43(1):48-53.

**The quantitative electroencephalogram and the low-resolution electrical tomographic analysis in posttraumatic stress disorder.**

Todder D, Levine J, Abujumah A, Mater M, Cohen H, Kaplan Z.

Source: Ben Gurion University, Faculty of Health, Beer Sheva, Israel. dtoder@netvision.net.il

Abstract

The electroencephalogram (EEG) is the recording of the brain electrical activity as measured on the scalp. Using mathematical algorithms, the 3-dimensional (3D) distribution of the electrical potential inside the brain can be calculated. One of the methods to calculate it is the low-resolution electrical tomographic analysis (LORETA). In this research, we seek to find the brain structures that differentiate patients with posttraumatic stress disorder (PTSD) from controls. Ten right-handed consenting adult male patients were recruited from a PTSD clinic. All patients fulfilled Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition, Text Revision [DSM-IV-TR]) criteria for chronic PTSD (duration >2 years.) and were on drug treatment regimens that had been stable for at least 2 months (involving only serotonin reuptake inhibitors [SSRIs] and benzodiazepines). The control group consisted of 10 healthy hospital staff members. All study participants underwent 19 channel EEG measurements according to current standards of practice. All artifact-free EEG strips were examined for spectral as well as LORETA analysis focusing on the theta (4-7 Hz) band which is suggested to reflect the activity of the limbic system. The theta band showed a statistically significant difference ( $P < .05$ ) between the 2 groups in the right temporal lobe and in both the right and left frontal lobes. Our findings support existing research data obtained via other imaging technologies, which demonstrated structural alterations in the right temporal and frontal areas in PTSD. These results indicate that combining quantitative EEG (QEEG) and the LORETA method, among other methods, may improve the neuroanatomical resolution of EEG data analysis.

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<http://omicsgroup.org/journals/JSDT/JSDT-1-e105.pdf> (full text)

**Editorial: Resilience through Sleep.**

Julie Poulin, Wun Jung Kim, Anne Germain

University of Pittsburgh Medical Center, Western Psychiatric Institute and Clinic, Pittsburgh USA

J Sleep Disord Ther 2011, 1:2

The functions of sleep have been an ongoing question for clinicians and researchers interested in the sleeping brain. Historically, sleep was considered as a general restorative process where the brain and



the body were mostly inactive. This concept had to be revised first when “paradoxical sleep”, also known as rapid-eye movement (REM) sleep was discovered with the surprising observation of an intense activation in the polysomnographic signal while the sleeper appeared completely inactive physically, a sleep stage also named rapid-eye-movement sleep (REM) [1]. Subsequent studies have shown that REM and non-REM sleep states contribute to the homeostasis in functions such as emotion regulation and learning and memory, as well as cardiovascular, metabolic, and immune functions [2]. An interesting suggestion about the possible function of REM sleep has been proposed by Crick and Mitchison in 1983 [3]. Using a computer model, these authors suggest that one mechanism of REM sleep is to remove certain mode of interactions between neurons, a process they named “reverse learning” or “unlearning”. These authors discussed that one function of REM sleep could be to “forget” irrelevant information as well as to remember relevant information for survival and adaptation. Using polysomnography in humans [4,5], Feinberg and Campbell proposed that slowwave- sleep (SWS) is important for cortical pruning, a process essential to neuroplasticity. Neuroplasticity refers to the molecular and cellular changes in neuronal networks occurring in response to inputs from the environment. Such a neurophysiologic process is an important part of learning, memory and adaptation mechanisms.

Healthy adaptations are essential to the maintenance of psychological health. The ability to successfully adapt to and recover from adverse conditions such as traumatic experiences in humans is called resilience. Psychological resilience refers to actions and attitudes the individual can use to adapt to challenging situations and to reach a new level of functioning; it can also produce a ‘steeling effect’ that promotes growth. Psychological resilience can be promoted by reducing risk factors for poor psychiatric outcomes following traumatic experiences and by increasing or reinforcing protective factors. Most studies on risk and protective factors have investigated psychosocial factors. Biological factors, such as sleep, also deserve to be seriously considered as an important part of resilience, since the disruption of sleep is a robust risk factor, whereas the treatment of sleep disturbances improves daytime emotional functioning. Therefore, the detection of sleep disturbances before or early after traumatic exposure could lead to increased resilience and accelerated recovery from trauma reactions.

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<http://www.ncbi.nlm.nih.gov/pubmed/22429105?dopt=Abstract>

Expert Opin Pharmacother. 2012 Apr;13(6):895-905. Epub 2012 Mar 19.

### **Prolonged-release formulation of melatonin (Circadin) for the treatment of insomnia.**

Lemoine P, Zisapel N.

Source: The Clinique Lyon-Lumière , 33 bis rue du 8 Mai 1945, Meyzieu 69330 , France  
patrick.lemoine99@free.fr.

## Abstract

Introduction: Insomnia is common among the elderly. The use of hypnotic drugs in elderly patients is frequently criticized owing to dependency, cognitive impairments, falls and withdrawal effects. The production of melatonin, a physiological sleep and circadian rhythm regulator, declines with age. Prolonged-release melatonin (Circadin®), designed to mimic the endogenous pattern of melatonin production, is licensed for insomnia in patients aged  $\geq 55$  years. Areas covered: This review summarizes published studies on Circadin's efficacy and safety (Summary of Product Characteristics and Medline search on 'Circadin' and 'insomnia'). Expert opinion: The main significant and clinically relevant benefits are improvements in sleep quality and latency, next-day morning alertness and quality of life. The responses may develop over several days. An oral 2-mg dose once daily, for 3 months, has generally been well tolerated with no rebound, withdrawal or 'hangover' effects and no safety concerns on concomitant therapy with antihypertensive, antidiabetic, lipid-lowering or anti-inflammatory drugs. Untoward effects of hypnotics on cognition, memory, postural stability and sleep structure are not seen with Circadin. Given as a first-line prescription, with 13 weeks' posology and the lack of rebound effects, Circadin has the potential to improve quality of life in insomnia patients aged 55 years and older and avoid long-term use of hypnotics.

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<http://www.ncbi.nlm.nih.gov/pubmed/22424586?dopt=Abstract>

Expert Opin Pharmacother. 2012 Apr;13(6):879-93. Epub 2012 Mar 19.

### **Zolpidem for insomnia.**

Greenblatt DJ, Roth T.

Source: Tufts University School of Medicine, Department of Molecular Physiology and Pharmacology, 136 Harrison Avenue, Boston MA 02111, USA +1 617 636 6997; +1 617 636 6738; dj.greenblatt@tufts.edu.

## Abstract

Introduction: The imidazopyridine derivative zolpidem, which acts as a benzodiazepine (BZ) receptor agonist, is the most widely prescribed hypnotic drug in the US.

Areas covered: This review addresses the neuroreceptor properties of zolpidem; clinical pharmacokinetics, pharmacodynamics and drug interactions; efficacy as a hypnotic; adverse effects; tolerance, dependence and withdrawal; relation to motor vehicle accidents and complex sleep behaviors; and new dosage forms.

Expert opinion: Approved doses of zolpidem (10 mg for adults, 5 mg for the elderly) are consistently effective in reducing sleep latency and consequently increasing sleep duration in patients with insomnia. However, favorable effects on sleep maintenance are observed less consistently. Residual daytime

effects are unlikely with recommended doses, and provided that at least 8 h elapse prior to arising. Hypnotic efficacy is maintained with repeated nightly use, and the risk of rebound insomnia is low. Dependence and abuse of zolpidem are no more likely to occur than with typical benzodiazepines. Newly available novel dosage forms of zolpidem have increased therapeutic options for patients with insomnia variants such as sleep maintenance insomnia and middle-of-the-night awakening.

### **Links of Interest**

Psychologists tailor training to military needs

<http://www.armytimes.com/news/2012/03/army-psychologists-tailor-training-to-military-needs-032212/>

Fargo's VA offers services to help military overcome sexual trauma

<http://www.wday.com/event/article/id/61138/group/homepage/>

The U.S. military doesn't know who is fit to fight

[http://www.washingtonpost.com/opinions/the-us-military-doesnt-know-who-is-fit-to-fight/2012/03/22/gIQAOLf6VS\\_story.html](http://www.washingtonpost.com/opinions/the-us-military-doesnt-know-who-is-fit-to-fight/2012/03/22/gIQAOLf6VS_story.html)

Daily headaches common in soldiers after concussion

[http://www.nlm.nih.gov/medlineplus/news/fullstory\\_123324.html](http://www.nlm.nih.gov/medlineplus/news/fullstory_123324.html)

DCoE Raises Awareness of Brain Injury Tools for Providers during Live Twitterinterview

<http://dcoe.health.mil/NewsArticle.aspx?id=3106>

Post-Traumatic Stress's Surprisingly Positive Flip Side

<http://www.nytimes.com/2012/03/25/magazine/post-traumatic-stress-surprisingly-positive-flip-side.html>

Toolkit Identifies MH Problems in Children of Military Parents

<http://ap.psychiatryonline.org/newsarticle.aspx?articleid=481199>

80% of wounded veterans cite mental health woes

<http://www.navytimes.com/news/2012/03/military-80-percent-of-wounded-vets-have-mental-health-trouble-032412w/>

Army says many soldiers treated for PTSD capable of returning to war

<http://www.startribune.com/nation/143937396.html>

NIH launches online resource on behavioral and social science research methods

[http://www.eurekalert.org/pub\\_releases/2012-03/notd-nlo032312.php](http://www.eurekalert.org/pub_releases/2012-03/notd-nlo032312.php)

Severe headaches tied to suicide attempts

[http://www.nlm.nih.gov/medlineplus/news/fullstory\\_123275.html](http://www.nlm.nih.gov/medlineplus/news/fullstory_123275.html)

Army focus on post-traumatic stress disorder shifts toward prevention

[http://www.army.mil/article/76340/Army\\_focus\\_on\\_post\\_traumatic\\_stress\\_disorder\\_shifts\\_toward\\_prevention/](http://www.army.mil/article/76340/Army_focus_on_post_traumatic_stress_disorder_shifts_toward_prevention/)

Kevlar for the Mind: Helping children cope with a parent's PTSD

<http://militarytimes.com/offduty/health/offduty-kevlar-for-the-mind-helping-children-cope-with-parents-ptsd-032612/>

Finding Clues in the Fearful Brain

<http://opinionator.blogs.nytimes.com/2012/03/25/following-fear-down-the-brains-pathways/>

Resiliency app nears 20,000 downloads

[http://www.army.mil/article/76183/Resiliency\\_app\\_nears\\_20\\_000\\_downloads/](http://www.army.mil/article/76183/Resiliency_app_nears_20_000_downloads/)

Veterans battle PTSD stigma -- even if they don't have it

[http://todayhealth.today.msnbc.msn.com/\\_news/2012/03/28/10890087-veterans-battle-ptsd-stigma-even-if-they-dont-have-it](http://todayhealth.today.msnbc.msn.com/_news/2012/03/28/10890087-veterans-battle-ptsd-stigma-even-if-they-dont-have-it)

Emergency dispatchers suffer from symptoms of PTSD, study reveals

[http://www.eurekalert.org/pub\\_releases/2012-03/w-eds032712.php](http://www.eurekalert.org/pub_releases/2012-03/w-eds032712.php)

Study: Stress-induced cortisol facilitates threat-related decision making among police officers

[http://www.eurekalert.org/pub\\_releases/2012-03/cbs-ssc032112.php](http://www.eurekalert.org/pub_releases/2012-03/cbs-ssc032112.php)

DOD, VA partnership key in treating brain trauma

[http://www.army.mil/article/76136/DOD\\_VA\\_partnership\\_key\\_in\\_treating\\_brain\\_trauma/](http://www.army.mil/article/76136/DOD_VA_partnership_key_in_treating_brain_trauma/)

Soldiers recovering from traumatic brain injury test combat skills

[http://www.army.mil/article/76032/Soldiers\\_recovering\\_from\\_traumatic\\_brain\\_injury\\_test\\_combat\\_skills](http://www.army.mil/article/76032/Soldiers_recovering_from_traumatic_brain_injury_test_combat_skills)

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### **Research Tip of the Week: TextFixer**

You cut, you paste...and it's a mess – especially if a PDF document is a source. You need to know about TextFixer :

<http://www.textfixer.com/tools/remove-line-breaks.php>

You can remove line breaks from blocks of text but preserve paragraph breaks with this tool.

If you've ever received text that was formatted in a skinny column with line breaks at the end of each line, like text from an email or copy and pasted text from a PDF column then this tool is pretty darn handy.

You also have the option of just removing all line breaks without preserving paragraph breaks.

Use this tool because spending hours manually removing line breaks sucks.

I leave a browser tab open to the site all day. *So* useful.

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Shirl Kennedy  
Web Content Strategist  
Center for Deployment Psychology  
[www.deploymentpsych.org](http://www.deploymentpsych.org)  
[skennedy@deploymentpsych.org](mailto:skennedy@deploymentpsych.org)  
301-816-4749