A Social Psychological Perspective on Trauma and Trauma Disorders

Daniel Buhalo MD

Grand Rounds 2/7/24

Disclosures

- No disclosures with regards to today’s presentation

Goals and Objectives

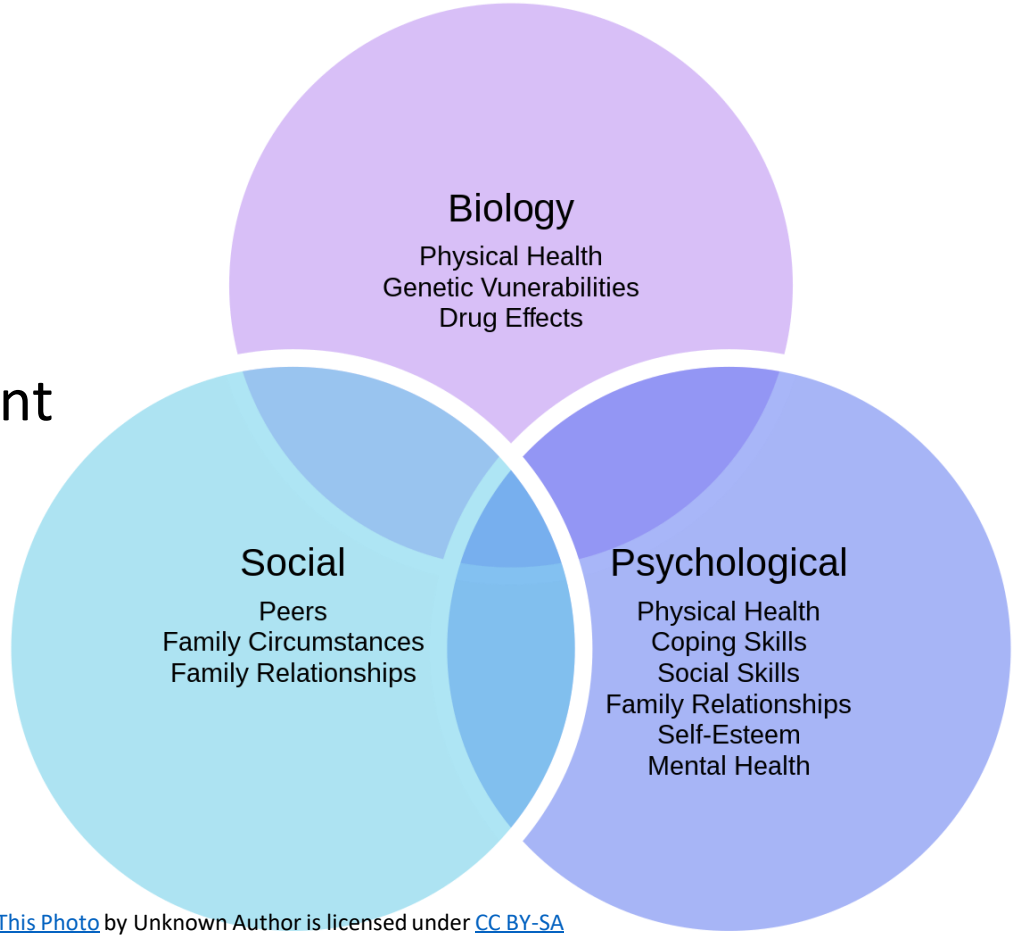
- Identify how sociological and cultural forces have framed the understanding of trauma and trauma disorders
- Discuss how past experiences, previous generations' experience, and cultural interpretations influence an individual's reaction to a traumatic event
- Describe social support and social identity as factors that can exacerbate the experience of trauma but that can also be protective.

Introduction

- Worldwide, more than 70% of adults will experience at least one stressful, “traumatic” event in their lives
- Many respond with an initial acute stress reaction or increased anxiety
- For many this remits spontaneously over a few months
- A small group of these will have more persistent decreased functionality

Introduction

- Biological
- Psychological
- Social
  - Type of event and social framing of the event
  - Social identity
  - Social support



Defining Trauma

- Medical definition (dictionary.com): “A body wound or shock produced by sudden physical injury, as from violence or accident”
- Psychological definition (dictionary.com): “an experience that produces psychological injury or pain”
- In both definitions, the event itself is important but so is the impact on the person experiencing it

History

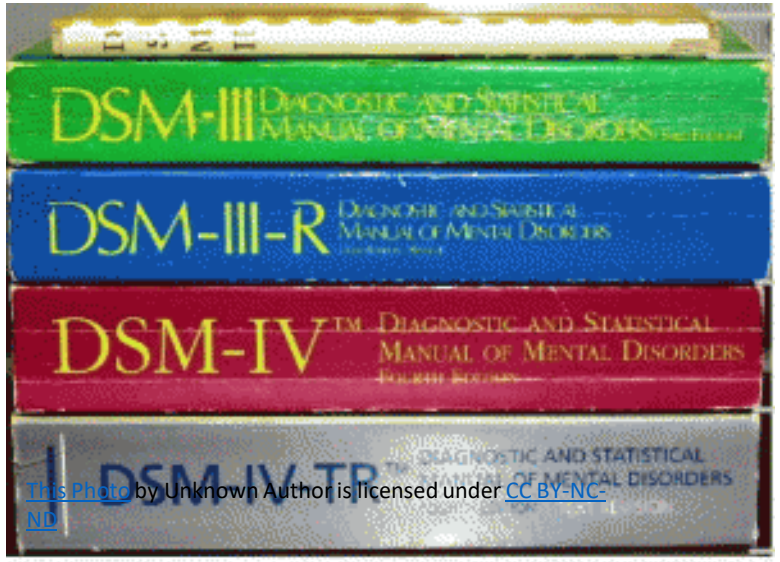
- “Traumatic neurosis” and “railway spine”
  - Mid-late 1800s railway and industrial accidents **without** physical injury
- “Shell shock”
  - WWI, episodes of blindness, deafness and muteness without organic cause

History

- Kardiner
  - WWII era American psychiatrist
  - Symptoms result of an adaptation when the psychological resources needed to process an event were greater than what the individual could muster at the time

History

- DSM III
  - PTSD first introduced
  - Personality and risk factors less important than the severity of the experience
  - “Outside the range of usual human experience”
  - Allowed for restitution in the form of ongoing service-connected disability for Vietnam-era veterans



DSM-V

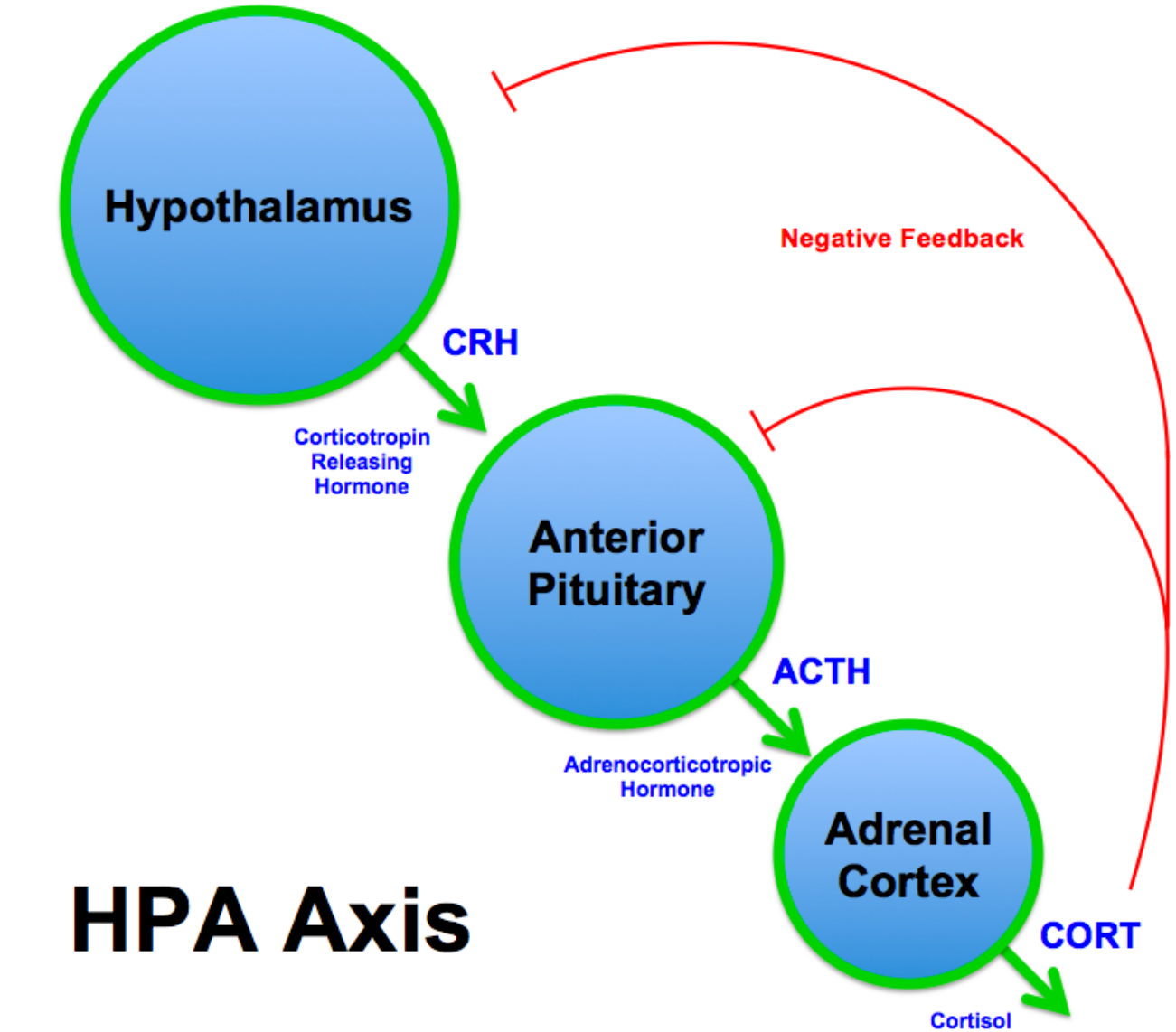
- Event must have exposed the individual to “actual or threatened death, serious injury, or sexual violence”
- Indirect exposure to the event: limited to learning an event has occurred to a close family member or friend, or repetitive exposure to images/media through work
- Otherwise, “exposure through electronic media, TV, movies, or pictures” is excluded

DSM-V

- 4 major symptom groups
  - Re-experiencing the event
  - Avoidance of thoughts or triggers
  - Increased sense of current threat
  - Mood symptoms
- 20 possible symptoms, with at least 1 or 2 required from each of the 4 categories

Biological Bases of PTSD

- Hypothalamic-pituitary-adrenal axis (HPA axis)
  - Responsible for the stress response (cortisol)
  - Low basal cortisol levels at time of experiencing trauma associated with PTSD –unopposed catecholamine surge and stimulation of sympathetic nervous system
- Fear and memory circuitry
  - Smaller hippocampal volume
  - Increased amygdala activation
  - Decreased medial prefrontal cortex activation



Psychological Factors

- Dissociation has long been observed and studied as a reaction to trauma
- Maladaptive defense mechanism for proceeding with day-to-day life
- Memory disturbances, alterations in consciousness, splits in identity, depersonalization and derealization
- Painful traumatic components of memories are split off and compartmentalized

Dissociation

- Failure to adequately integrate the traumatic memory into one's self-concept
- The painful memory may remain hidden or surface in distressing and intrusive flashbacks
- Dissociative symptoms during and after a dangerous event increases risk of PTSD

Sociological Perspective on Trauma

- Events are given meaning by cultural and social interaction
- Dangerous or traumatic events are framed and defined socially
- Type of event
  - Environmental vs Interpersonal

Environmental Events

- An event which may destroy or injure individuals, their belongings, and their view of their social order
  - i.e. house fire, auto accident, volcano, flood, tsunami, pandemic
- With adequate resources and the opportunity to rebuild, most people regain their psychological integrity
- Prevalence of PTSD following this type of event is lower, less than 20% for auto accidents, as low as 10% for other types of industrial accidents, and in the 3-10% range for various natural disasters

Interpersonal Events

- Instances of suffering wrought deliberately by other human beings or groups of human beings
  - i.e. rape, robbery, assault, domestic violence, war
- Primary driver of PTSD symptomatology
- Prevalence rates of 33-50% on average
- Also the highest risk for acute stress disorder

Social Construction of Trauma

- Dangerous events are unpredictable and chaotic by nature and amplify existential anxieties / sense of meaninglessness
- Societies construct methods of predicting, mitigating, and explaining dangerous events
  - “God’s plan,” karma, etc
- Bhutanese torture survivors – few developed PTSD following imprisonment, believed their suffering came from bad karma

Social Construction of Trauma

- Group mindsets develop to mediate boundless violence
  - i.e. “rules of war,” killing of women and children evokes anxiety in a way that killing soldiers does not
- Attribution to the victim
  - Dehumanizing the victim or blaming the victim
- Belief in a political ideology protects against psychological effects of violence

Social Identity

- Construction of a group identity accentuates similarities and minimizes differences
- Characteristics of an individual related to group identity are seen as positive
- Those in other groups not possessing the same characteristics are seen as negative

Social Identity

- Positive effects on self-esteem, regardless of overall social standing of the group within the larger social structure
- Trust, support, and connection provide psychological resources
- These resources protect against effects of traumatizing events
  - Increased resilience
  - Decreased psychological distress
- Group identity can provide a “bird’s-eye-view”
  - Place value on the future of the group as a whole instead of individual suffering

Social Identity as a Risk for Trauma

- Group identity can put an individual at risk for discrimination spanning generations
  - Example of Native American historical trauma
  - Mass death, forced relocation, children forced to attend boarding schools
  - Forced “integration” with the dominant culture
  - Symptoms of dissociation, anger, numbing of emotions, and avoidance seen across generations
- Cycles of violence
  - Children of mothers who experienced the Rwandan genocide had increased rates of experiencing violence, instability, domestic violence, etc.

Multiple Social Identities

- Social identities range from race to gender to sexual orientation and more.
- Identities are intertwined
- “Double discrimination”
  - Example of LGBTQ POC reporting feeling alienated within their own groups
  - Multiple marginalized identities at increased risk

Social Support as Protective

- Social Support: Those aspects of individuals' relationships with others, and with communities as a whole, which contribute to the individuals' well-being.
- A protective factor against development of mental illness including PTSD, depression, anxiety, as well as general morbidity and mortality
- Formal group therapy session, institution of monetary or resource-based aid, or simply relying on presence of loved ones for comfort and emotional support
- Provide an outlet for expressing experiences and receiving assurance

Diathesis-Stress Model

- Stressors in the environment interact with biological and psychological characteristics of individuals
- This engenders an individualized response
- Traumatic events are significant stressors which are often responded to in maladaptive or debilitating ways at the individual level
- Social support can serve as a “buffer” to soften the impact of this type of event

Diathesis-Stress Model

- Individual stress response is influenced by:
  - Social networks
  - Social capital
  - Past social experiences
- Higher levels of perceived help following an event associated with better outcomes
- Environmental vs Interpersonal events: natural disasters are shared, collective events which garner more universal empathy and support

Social Support and Cognitive Processing

- Presence of social support can influence the way trauma is perceived in the moment
- fMRI studies – fear responses are dampened by physical touch and presence of loved ones
- Social relationships influence oxytocin activity and amygdala circuitry

Individual Perceptions of Social Support

- Individuals who view their communities as less supportive to begin with may be at higher risk
  - Survey of individuals impacted by Hurricane Sandy
  - Those who reported a higher regard of the ability of hospitals and medical providers to cope with a large-scale disaster had better outcomes
- Perceived quality of support provided is more important than quantity
  - Supports that are viewed as more relevant to the situation are more protective

Timing of Social Support

- Timely implementation of supports and services are more protective
- Establishment of therapeutic support groups
- Assurances to survivors that they are not alone
- Minority groups or groups lacking political or social power tend to have fewer supportive resources available
  - Example of Mexican flood in 1999 – those already facing economic hardship prior to natural disaster faced a longer road to recovery compared to more privileged groups

Treatment Options for PTSD

- Medication
- Trauma-focused psychotherapy
- Prolonged exposure therapy
- CBT for PTSD
- Narrative exposure therapy
- EMDR
- **Social treatments and interventions**

Therapeutic Support Groups

- Forums where patients can interact with and learn from peers with similar conditions
  - In-person or online
- Environment where impact of stigma is less acutely felt
- Education
- Models for behavior and more effective coping

Peer Support Groups

- Example of online forums for US military veterans with PTSD
  - Participants reported these spaces were useful for discussing stigma, identifying with other members, learning to cope with conflict
  - Relative anonymity allowed for more frank discussion of fears, emotions, and desire to seek help

Social Support Interventions

- Directing patients to important resources like food, shelter, etc.
  - Making the burden community-wide rather than individual
- Debriefing and preventive psychoeducation exercises
  - Teaching stress management skills to first responders
  - Most effective of these interventions were those designed to reduce risk factors, for example teaching stress-reduction techniques or increasing physical exercise
  - Debriefing alone was not shown to reduce trauma symptom development

Recovery Narratives

- Recovery narrative: a way of thinking about a traumatic experience that integrates it with the rest of the community's life and identity
- Transform the experience over time into one which provides meaning and resilience to group members, rather than focusing on the destructive nature of the event itself
- Group members become more tightly united and more protected following collective trauma

Conclusion

- Not all dangerous or “traumatic” events result in the development of psychopathology
- This is due to biological, psychological, and **social** factors
- Our perception of trauma is socially constructed
- Social identity and social support modulate responses to these events and are potential sources of resilience

Acknowledgments

- Dr. Maryssa Lyons
- Dr. April Fallon

References

- Alessi, E. J., Kahn, S., Greenfield, B., Woolner, L., & Manning, D. (2020). A Qualitative Exploration of the Integration Experiences of LGBTQ Refugees Who Fled from the Middle East, North Africa, and Central and South Asia to Austria and the Netherlands. Sexuality Research and Social Policy, 17(1), 13–26. https://doi.org/10.1007/s13178-018-0364-7
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.
- Armour, C., Karstoft, K.-I., & Richardson, J. D. (2014). The co-occurrence of PTSD and dissociation: Differentiating severe PTSD from dissociative-PTSD. Social Psychiatry and Psychiatric Epidemiology, 49(8), 1297–1306. https://doi.org/10.1007/s00127-014-0819-y
- Ben-Ezra, M., Goodwin, R., Palgi, Y., Kaniasty, K., Crawford, M. Z., Weinberger, A., & Hamama-Raz, Y. (2014). Concomitants of perceived trust in hospital and medical services following Hurricane Sandy. Psychiatry Research, 220(3), 1160–1162. https://doi.org/10.1016/j.psychres.2014.08.012
- Benight, C. C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. Behaviour Research and Therapy, 42(10), 1129–1148. https://doi.org/10.1016/j.brat.2003.08.008
- Berckmoes, L., Eichelsheim, V., Rutayisire, T., Annemiek, R., & Hola, B. (2017). How Legacies of Genocide Are Transmitted in the Family Environment: A Qualitative Study of Two Generations in Rwanda. Societies, 7, 24. https://doi.org/10.3390/soc7030024
- Breidenstine, A. S., Bailey, L. O., Zeanah, C. H., & Larrieu, J. A. (2011). Attachment and Trauma in Early Childhood: A Review. Journal of Child & Adolescent Trauma, 4(4), 274–290. https://doi.org/10.1080/19361521.2011.609155
- Cerulo, K. A. (1997). Identity Construction: New Issues, New Directions. Annual Review of Sociology, 23(1), 385–409. https://doi.org/10.1146/annurev.soc.23.1.385

References

- Charuvastra, A., & Cloitre, M. (2008). Social Bonds and Posttraumatic Stress Disorder. Annual Review of Psychology, 59(1), 301–328. https://doi.org/10.1146/annurev.psych.58.110405.085650
- Craig, W., Boniel-Nissim, M., King, N., Walsh, S. D., Boer, M., Donnelly, P. D., Harel-Fisch, Y., Malinowska-Cieślik, M., Gaspar de Matos, M., Cosma, A., Van den Eijnden, R., Vieno, A., Elgar, F. J., Molcho, M., Bjereld, Y., & Pickett, W. (2020). Social Media Use and Cyber-Bullying: A Cross-National Analysis of Young People in 42 Countries. Journal of Adolescent Health, 66(6), S100–S108. https://doi.org/10.1016/j.jadohealth.2020.03.006
- Davis, J. (2001). American Indian Boarding School Experiences: Recent Studies from Native Perspectives. OAH Magazine of History, 15(2), 20–22. https://doi.org/10.1093/maghis/15.2.20
- Department of Veterans Affairs/Department of Defense. (2017). Management of Posttraumatic Stress Disorder and Acute Stress Reaction 2017—VA/DoD Clinical Practice Guidelines [General Information]. https://www.healthquality.va.gov/guidelines/MH/ptsd/
- DePrince, A. P., & Freyd, J. J. (2007). Trauma-induced dissociation. In M. J. Friedman, T. M. Keane, & P. A. Resick (Eds.), Handbook of PTSD: Science and Practice (pp. 135–150). The Guilford Press. https://dl.uswr.ac.ir/bitstream/Hannan/130962/1/2007%20-%20Handbook%20of%20PTSD%20-%20Friedman%2C%20Keane%2C%20Resick.pdf#page=151
- Djafarova, E., & Trofimenko, O. (2017). Exploring the relationships between self-presentation and self-esteem of mothers in social media in Russia. Computers in Human Behavior, 73, 20–27. https://doi.org/10.1016/j.chb.2017.03.021
- Dunlop, B. W., & Wong, A. (2019). The hypothalamic-pituitary-adrenal axis in PTSD: Pathophysiology and treatment interventions. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 89, 361–379. https://doi.org/10.1016/j.pnpbp.2018.10.010

References

- Fattoracci, E. S. M., Revels-Macalinao, M., & Huynh, Q.-L. (2020). Greater than the sum of racism and heterosexism: Intersectional microaggressions toward racial/ethnic and sexual minority group members. Cultural Diversity and Ethnic Minority Psychology. https://doi.org/10.1037/cdp0000329
- Foa, E. B., Hembree, E., & Rothbaum, B. (2007). Prolonged Exposure Therapy for PTSD: Therapist Guide: Emotional processing of traumatic experiences. Oxford University Press. https://doi.org/10.1093/med:psych/9780195308501.001.0001
- Freud, S. (1895). Studies of Hysteria.
- Ghabrial, M. A. (2017). "Trying to Figure Out Where We Belong": Narratives of Racialized Sexual Minorities on Community, Identity, Discrimination, and Health. Sexuality Research and Social Policy, 14(1), 42–55. https://doi.org/10.1007/s13178-016-0229-x
- Goodwin, R., Kaniasty, K., Sun, S., & Ben-Ezra, M. (2017). Psychological distress and prejudice following terror attacks in France. Journal of Psychiatric Research, 91, 111–115. https://doi.org/10.1016/j.jpsychires.2017.03.001
- GUIDELINES ON INTERNATIONAL PROTECTION NO. 9: (n.d.).
- Gumb, L. (2018). Trauma and Recovery: Finding the Ordinary Hero in Fictional Recovery Narratives. Journal of Humanistic Psychology, 58(4), 460–474. https://doi.org/10.1177/0022167817749703

References

- Hamama-Raz, Y., Palgi, Y., Shrira, A., Goodwin, R., Kaniasty, K., & Ben-Ezra, M. (2015). Gender Differences in Psychological Reactions to Hurricane Sandy Among New York Metropolitan Area Residents. Psychiatric Quarterly, 86(2), 285–296. https://doi.org/10.1007/s11126-014-9333-3
- Hanson, R. F., & Spratt, E. G. (2000). Reactive Attachment Disorder: What We Know about the Disorder and Implications for Treatment. Child Maltreatment, 5(2), 137–145. https://doi.org/10.1177/1077559500005002005
- Hillman, J. L. (2002). The Social Psychology of Trauma: What Clinicians Need to Know. In G. Stricker (Ed.), Crisis Intervention and Trauma (pp. 17–32). Springer US. https://doi.org/10.1007/978-1-4615-0771-0_2
- Hirschberger, G. (2018). Collective Trauma and the Social Construction of Meaning. Frontiers in Psychology, 9, 1441. https://doi.org/10.3389/fpsyg.2018.01441
- Hopwood, T. L., Schutte, N. S., & Loi, N. M. (2019). Anticipatory Traumatic Reaction: Outcomes Arising From Secondary Exposure to Disasters and Large-Scale Threats. Assessment, 26(8), 1427–1443. https://doi.org/10.1177/1073191117731815
- House, J. S., Umberson, D., & work(s):, K. R. L. R. (1988). Structures and Processes of Social Support. Annual Review of Sociology, 1, 293–318.
- Jan, M., Soomro, S. A., & Ahmad, N. (2017). Impact of Social Media on Self-Esteem. European Scientific Journal, ESJ, 13(23), 329. https://doi.org/10.19044/esj.2017.v13n23p329
- Jensen, T. K., Holt, T., Ormhaug, S. M., Egeland, K., Granly, L., Hoaas, L. C., Hukkelberg, S. S., Indregard, T., Stormyren, S. D., & Wentzel-Larsen, T. (2014). A Randomized Effectiveness Study Comparing Trauma-Focused Cognitive Behavioral Therapy With Therapy as Usual for Youth. Journal of Clinical Child & Adolescent Psychology, 43(3), 356–369. https://doi.org/10.1080/15374416.2013.822307

References

- Jones, E., & Wessely, S. (2006). Psychological trauma: A historical perspective. Psychiatry, 5(7), 217–220. https://doi.org/10.1053/j.mppsy.2006.04.011
- Kaniasty, K. (2012). Predicting social psychological well-being following trauma: The role of postdisaster social support. Psychological Trauma: Theory, Research, Practice, and Policy, 4(1), 22–33. https://doi.org/10.1037/a0021412
- Kelmendi, B., Adams, T. G., Yarnell, S., Southwick, S., Abdallah, C. G., & Krystal, J. H. (2016). PTSD: From neurobiology to pharmacological treatments. European Journal of Psychotraumatology, 7(1), 31858. https://doi.org/10.3402/ejpt.v7.31858
- Lifton, R. (1973). Home from the War: Vietnam Veterans—Neither Victims nor Executioners, Simon & Schuster (New York City), 1973.
- Lucero, L. (2017). Safe spaces in online places: Social media and LGBTQ youth. Multicultural Education Review, 9(2), 117–128. https://doi.org/10.1080/2005615X.2017.1313482
- Mohatt, N. V., Thompson, A. B., Thai, N. D., & Tebes, J. K. (2014). Historical trauma as public narrative: A conceptual review of how history impacts present-day health. Social Science & Medicine, 106, 128–136. https://doi.org/10.1016/j.socscimed.2014.01.043
- Morley, C. A., & Kohrt, B. A. (2013). Impact of Peer Support on PTSD, Hope, and Functional Impairment: A Mixed-Methods Study of Child Soldiers in Nepal. Journal of Aggression, Maltreatment & Trauma, 22(7), 714–734. https://doi.org/10.1080/10926771.2013.813882
- Muldoon, O. T., Haslam, S. A., Haslam, C., Cruwys, T., Kearns, M., & Jetten, J. (2019). The social psychology of responses to trauma: Social identity pathways associated with divergent traumatic responses. European Review of Social Psychology, 30(1), 311–348. https://doi.org/10.1080/10463283.2020.1711628

References

- Neria, Y., Nandi, A., & Galea, S. (2008). Post-traumatic stress disorder following disasters: A systematic review. Psychological Medicine, 38(4), 467–480. https://doi.org/10.1017/S0033291707001353
- Norris, F. H., Baker, C. K., Murphy, A. D., & Kaniasty, K. (2005). Social Support Mobilization and Deterioration after Mexico's 1999 Flood: Effects of Context, Gender, and Time. American Journal of Community Psychology, 36(1–2), 15–28. https://doi.org/10.1007/s10464-005-6230-9
- Ogle, C. M., Rubin, D. C., & Siegler, I. C. (2015). The relation between insecure attachment and posttraumatic stress: Early life versus adulthood traumas. Psychological Trauma: Theory, Research, Practice, and Policy, 7(4), 324–332. https://doi.org/10.1037/tra0000015
- O'Neill, L., Fraser, T., Kitchenham, A., & McDonald, V. (2018). Hidden Burdens: A Review of Intergenerational, Historical and Complex Trauma, Implications for Indigenous Families. Journal of Child & Adolescent Trauma, 11(2), 173–186. https://doi.org/10.1007/s40653-016-0117-9
- Perrin, P. B., Sutter, M. E., Trujillo, M. A., Henry, R. S., & Pugh, M. (2020). The minority strengths model: Development and initial path analytic validation in racially/ethnically diverse LGBTQ individuals. Journal of Clinical Psychology, 76(1), 118–136. https://doi.org/10.1002/jclp.22850
- Pfefferbaum, B., Seale, T., Brandt, E., Pfefferbaum, R., Doughty, D., & Rainwater, S. (2003). Media Exposure in Children One Hundred Miles from a Terrorist Bombing. Annals of Clinical Psychiatry, 15(1), 1–8. https://doi.org/10.3109/10401230309085664
- Polizzi, Lynn, S., & Perry, A. (2020). StreSS and Coping in the time of CoVid-19: PathwayS to reSilienCe and reCoVery. Clinical Neuropsychiatry, 17(2), 59–62.
- Presti, G., Mchugh, L., Gloster, A., Karekla, M., & Hayes, S. C. (2020). The Dynamics of fear at the Time of COVID-19: A Contextual Behavioral Science Perspective. Clinical Neuropsychiatry, 17(2), 65–71. https://doi.org/10.36131/ CN20200206

References

- Raskind, M. A., Peskind, E. R., Chow, B., Harris, C., Davis-Karim, A., Holmes, H. A., Hart, K. L., McFall, M., Mellman, T. A., Reist, C., Romesser, J., Rosenheck, R., Shih, M.-C., Stein, M. B., Swift, R., Gleason, T., Lu, Y., & Huang, G. D. (2018). Trial of Prazosin for Post-Traumatic Stress Disorder in Military Veterans. New England Journal of Medicine, 378(6), 507–517. https://doi.org/10.1056/NEJMoa1507598
- Reinhard, M. A., Dewald-Kaufmann, J., Wüstenberg, T., Musil, R., Barton, B. B., Jobst, A., & Padberg, F. (2020). The vicious circle of social exclusion and psychopathology: A systematic review of experimental ostracism research in psychiatric disorders. European Archives of Psychiatry and Clinical Neuroscience, 270(5), 521–532. https://doi.org/10.1007/s00406-019-01074-1
- Rosler, N., & Branscombe, N. R. (2020). Inclusivity of past collective trauma and its implications for current intractable conflict: The mediating role of moral lessons. British Journal of Social Psychology, 59(1), 171–188. https://doi.org/10.1111/bjso.12336
- Ross, R. (2019). Between Shell Shock and PTSD? 'Accident Neurosis' and Its Sequelae in Post-War Britain. Social History of Medicine, 32(3), 565–585. https://doi.org/10.1093/shm/hkx118
- Roth, M., Neuner, F., & Elbert, T. (2014). Transgenerational consequences of PTSD: risk factors for the mental health of children whose mothers have been exposed to the Rwandan genocide. 12.
- Sadika, B., Wiebe, E., Morrison, M. A., & Morrison, T. G. (2020). Intersectional Microaggressions and Social Support for LGBTQ Persons of Color: A Systematic Review of the Canadian-Based Empirical Literature. Journal of GLBT Family Studies, 16(2), 111–147. https://doi.org/10.1080/1550428X.2020.1724125
- Schaefer, C., Coyne, J. C., & Lazarus, R. S. (1981). The health-related functions of social support. Journal of Behavioral Medicine, 4(4), 381–406. https://doi.org/10.1007/BF00846149
- Shang, F., Kaniasty, K., Cowlishaw, S., Wade, D., Ma, H., & Forbes, D. (2019). Social support following a natural disaster: A longitudinal study of survivors of the 2013 Lushan earthquake in China. Psychiatry Research, 273, 641–646. https://doi.org/10.1016/j.psychres.2019.01.085
- Stana, A., Flynn, M., & Almeida, E. (2017). Battling the Stigma: Combat Veterans' Use of Social Support in an Online PTSD Forum. International Journal of Men's Health, 16(1), 20–36. https://doi.org/10.3149/jmh.1601.20

References

- Stanley, I. H., Hom, M. A., Chu, C., Dougherty, S. P., Gallyer, A. J., Spencer-Thomas, S., Shelef, L., Fruchter, E., Comtois, K. A., Gutierrez, P. M., Sachs-Ericsson, N. J., & Joiner, T. E. (2019). Perceptions of belongingness and social support attenuate PTSD symptom severity among firefighters: A multistudy investigation. Psychological Services, 16(4), 543–555. https://doi.org/10.1037/ser0000240
- Stets, J. E., & Burke, P. J. (2000). Identity Theory and Social Identity Theory. Social Psychology Quarterly, 63(3), 224. https://doi.org/10.2307/2695870
- van der Hart, O., & Brom, D. (2000). When the Victim Forgets. In A. Y. Shalev, R. Yehuda, & A. C. McFarlane (Eds.), International Handbook of Human Response to Trauma (pp. 233–248). Springer US. https://doi.org/10.1007/978-1-4615-4177-6_17
- van der Hart, O., Nijenhuis, E. R. S., & Solomon, R. (2010). Dissociation of the Personality in Complex Trauma-Related Disorders and EMDR: Theoretical Considerations. Journal of EMDR Practice and Research, 4(2), 76–92. https://doi.org/10.1891/1933-3196.4.2.76
- Van Der Hart, O., Nijenhuis, E., Steele, K., & Brown, D. (2004). Trauma-Related Dissociation: Conceptual Clarity Lost and Found. Australian & New Zealand Journal of Psychiatry, 38(11–12), 906–914. https://doi.org/10.1080/j.1440-1614.2004.01480.x
- VanElzakker, M. B., Staples-Bradley, L. K., & Shin, L. M. (2018). The Neurocircuitry of Fear and PTSD. In E. Vermetten, A. Germain, & T. C. Neylan (Eds.), Sleep and Combat-Related Post Traumatic Stress Disorder (pp. 111–125). Springer New York. https://doi.org/10.1007/978-1-4939-7148-0_10
- Woodhouse, S., Brown, R., & Ayers, S. (2018). A social model of Posttraumatic Stress Disorder (PTSD): Interpersonal trauma, attachment, group identification, disclosure, social acknowledgement and negative cognitions. Journal of Theoretical Social Psychology. http://sro.sussex.ac.uk/id/eprint/71912/
- World Health Organization. (2018). International classification of diseases for mortality and morbidity statistics (11th Revision). https://icd.who.int/browse11/l-m/en
- Yehuda, R., Hoge, C. W., McFarlane, A. C., Vermetten, E., Lanius, R. A., Nievergelt, C. M., Hobfoll, S. E., Koenen, K. C., Neylan, T. C., & Hyman, S. E. (2015). Post-traumatic stress disorder. Nature Reviews Disease Primers, 1(1), 15057. https://doi.org/10.1038/nrdp.2015.57
- Yellow Horse Brave Heart, M., Chase, J., Elkins, J., & Altschul, D. B. (2011). Historical Trauma Among Indigenous Peoples of the Americas: Concepts, Research, and Clinical Considerations. Journal of Psychoactive Drugs, 43(4), 282–290. https://doi.org/10.1080/02791072.2011.628913
- Young, M. (2004). Exploring the Meaning of Trauma in the South African Police Service. PhD Thesis, University of Pretoria. http://hdl.handle.net/2263/27855