TARGETING
COMORBIDITY IN AOD
TREATMENT WITH EMDR
THERAPY –
AN INTRODUCTION AND
OVERVIEW



·

Logan Harvey Clinical Psychologist Accredited EMDR Consultant

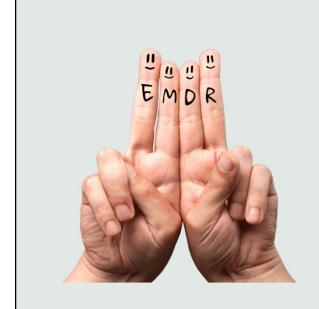
1

I'd like to begin by acknowledging the Traditional Owners of the land from which I am presenting. I would also like to pay my respects to Elders past, present, and emerging.

#### Please note:

There will be mention of experiences of a traumatic nature today – please be mindful of your own safety and take steps to support yourself if you find this uncomfortable

3



# Objectives:

- Identify the key components of EMDR therapy
- Understand the theory and evidence base for EMDR therapy
- Understand how EMDR therapy can be integrated into AOD clinical practice

# The Background → Initial discovery What's with the name?

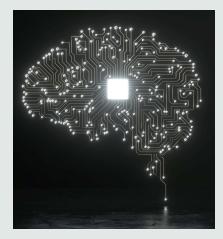
5

# Theoretical Model: The Adaptive Information Processing Model

"...the model regards most pathologies as derived from earlier life experiences that set in motion a continued pattern of affect, behaviour, cognitions, and consequent identity structures" (Shapiro (2001).

- 1. The brain has an innate capacity to adapt to, and process stressful events.
- 2. Some events disrupt this normal information processing
- 3. The memories of these events are then maladaptively stored, and generate symptoms

# Mechanisms of action – How might it work?



• There are a few proposed mechanisms of action and accompanying theoretical ideas.

(Novo Navarro et al., 2018; Schubert et al., 2009; Stickgold, 2002)

It doesn't appear that EMDR works merely by exposure to the trauma memory – as Prolonged Exposure does

(Lee et al., 2006)

• There is no definitive answer at this stage

This is not unusual in the psychotherapy literature though!

7

## What does EMDR therapy look like?

There are 8 phases of EMDR therapy:

- 1. History taking and treatment planning
- 2. Preparation & Stabilisation
- 3. Target Assessment
- 4. Desensitisation
- 5. Installation
- 6. Body scan
- 7. Closure
- 8. Re-evaluation

Not all in the same session (usually!)

## What does EMDR therapy look like?

There are 8 phases of EMDR therapy:

- 1. History taking and treatment planning
- 2. Preparation & Stabilisation
- 3. Target Assessment
- 4. Desensitisation
- 5. Installation
- 6. Body scan
- 7. Closure
- 8. Re-evaluation

May take multiple sessions No actual trauma processing

9

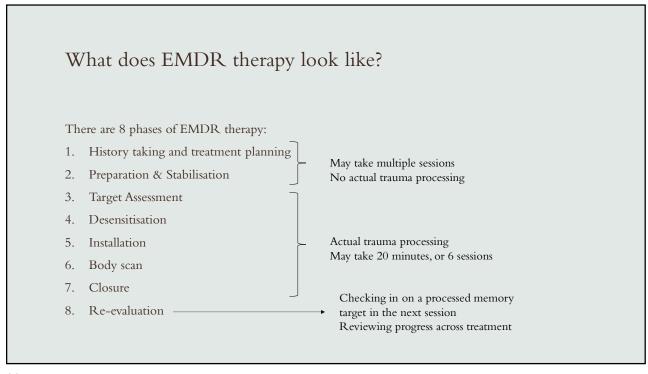
## What does EMDR therapy look like?

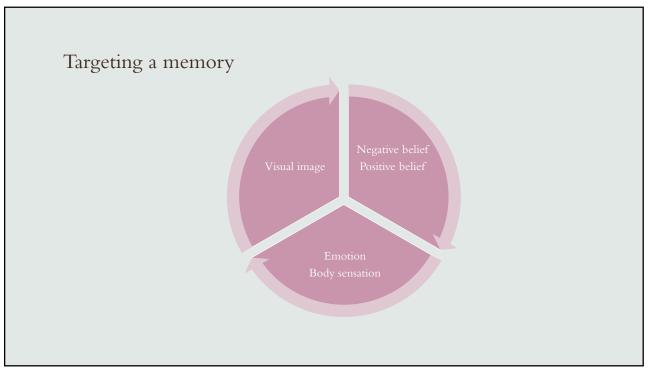
There are 8 phases of EMDR therapy:

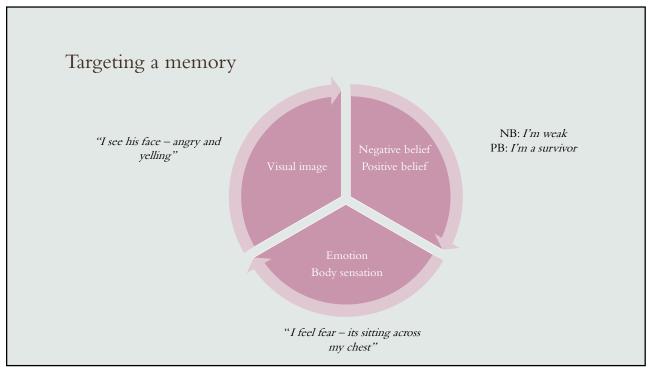
- 1. History taking and treatment planning
- 2. Preparation & Stabilisation
- 3. Target Assessment
- 4. Desensitisation
- 5. Installation
- 6. Body scan
- 7. Closure
- 8. Re-evaluation

May take multiple sessions No actual trauma processing

Actual trauma processing May take 20 minutes, or 6 sessions







13

# The three "prongs" of EMDR

EMDR Targets three key types of targets:

- Past events underlying the presenting issue
- Present (recent) triggers for the presenting issue
- Future events that might be triggers, or are feared events (whether real or imagined)

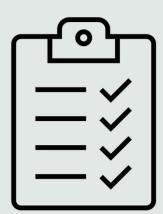
Past	Present	Future
My car accident	Driving my car now	I have to return to work and start driving again
	Hearing a screech of tyres	

# What's with the eye movements?

- EMDR involves the application of <u>bilateral</u> <u>stimulation</u>
  - Eye movements, tapping, auditory stimulation etc
- Despite the controversy, the eye movements do add something to the treatment (Lee & Cuijpers, 2013)
- There is evidence that eye movements during recall reduce the *vividness and emotional intensity of a memory* (Engelhard et al., 2019; Houben et al, 2020).
- It may do this in a few ways:
  - Reducing limbic system activation (de Voogd et al, 2018)
  - Taxing working memory (van Veen et al., 2019)
- This appears to then allow the brain to re-process the target memory and integrate *adaptive* information into the understanding of the event.



15



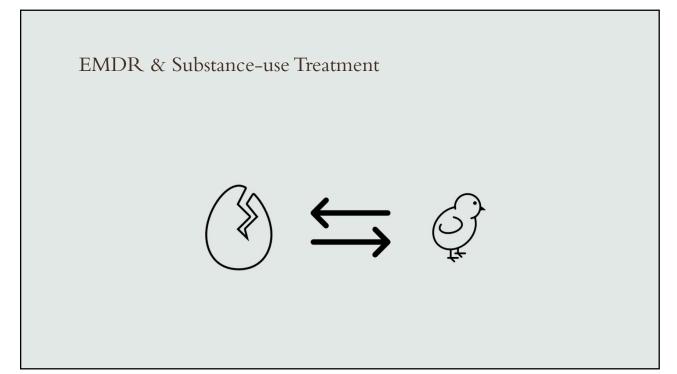
#### The evidence for PTSD is clear:

Endorsed for the treatment of PTSD by:

- World Health Organisation (WHO, 2013)
- Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex PTSD (Phoenix Australia, 2021)
- The International Society for Traumatic Stress Studies Guidelines for the Prevention and Treatment of PTSD (ISTSS, 2021)
- National Institute for Heath and Care Excellence UK (NICE, 2018)
- Australian Psychological Society (APS, 2018)



Τ,



# Addiction Focused Treatment

Targeting components of the addiction directly

Using EMDR to target:

- Cravings & Urges
- Addiction related memories (e.g., first use, relapse, adverse events)

# Trauma Focused Treatment

Targeting comorbidity to reduce the addictive behaviour indirectly

Using EMDR to target:

- Adverse experiences
- · Comorbid symptoms
- Negative self-beliefs

19

# Addiction Focused EMDR - Experimental Studies

Laboratory studies show that use of EMDR tasks can reduce *craving* and the intensity of associated *visual imagery* but these results are mixed – and not necessarily sustained (Littel et al., 2016; Markus et al., 2016)



#### Evidence for EMDR in Addiction Treatment

A broad range of *addiction* related studies/papers have been published:

- Alcohol (Abel & O'Brien, 2010; Hase et al., 2008; Markus et al., 2019; Markus et al., 2015; Markus et al., 2020)
- Tobacco (Littel et al., 2016; Markus et al., 2016)
- Opiates (Shapiro et al., 1994)
- **GHB** (Qurishi et al., 2017)
- Cocaine (Cecero & Carroll, 2000)
- Mixed substance use issues (Brown et al., 2015; Carletto et al., 2017; Kullack & Laugharne, 2016; Perez-Dandieu & Tapia, 2014; Rougemont-Bucking & Zimmerman, 2012; Tapia et al., 2017)

#### Behavioural addictions such as:

- Gambling (Bae et al., 2015; Henry, 1996; Miller, 2010; van Minnen et al., 2020)
- Internet (Bae & Kim, 2012)
- Sex (Cox & Howard, 2007)
- Mixed compulsive behaviours (Miller, 2012)

21

#### Evidence for EMDR in Addiction Treatment

#### ARTICLES

#### **EMDR Interventions in Addiction**

Wiebren Markus
IrisZorg, Institute for Addiction Care and Sheltered Housing, Arnhem, The Netherlands
Nijmegen Institute for Scientist-Practitioners in Addiction, Radiboud University, Nijmegen, The Netherlands
Hellen K, Hornsveld

The use of tobacco, alcohol, and illicit drugs is widespread and has significant negative consequences for the individual, their families, and the communities to which they belong. A substantial number of users develop an addiction disorder. Oure-oriented addiction treatment is challenging regarding treatment retention and relapser rates. Here, we discuss the potential of eye movement desensitization and reprocessing EMDR? therapy to aid addiction treatment. Two approaches are distinguished: traumstroused and addiction-focused EMDR therapy is to applicable protocols and research on both approaches is critically reviewed. Despite 20 years of development and research, the feasibility and efficiency of addiction-focused EMDR therapy is still largely uninvestigated. Exciting new possibilities, offered by research on working memory theory, are discussed. An overview of all resourcing and EMDR therapy interventions in addiction is presented; the paleted of EMDR interventions in addiction (PEIA). The article finishes with recommendations for further research in this field.

Keywords: craving; addiction; working memory; eye movement desensitization and reprocessing (EMDR) therapy; flashforwards; positive targets

Existing reviews have concluded EMDR may be useful in the treatment of addiction

(Tapia, 2019; Valiente-Gomez et al., 2017)

There are issues related to the methodology of studies and the risk of bias

(Cuijpers et al., 2020; Markus & Hornsveld, 2017)

To date there is not enough evidence to make definitive statements of efficacy

(Cuijpers et al., 2020)

#### Evidence for EMDR in Addiction Treatment

- EMDR has an evidence base in treating PTSD, and a developing evidence for other conditions such as depression
- EMDR has some impact on craving and the intensity of thoughts about substance use
  - These impacts might only be short lived
- Treatment studies have shown positive effects of EMDR on substance use
  - It is hard to draw conclusions about a specific approach though, as these studies use vastly different approaches and have quality issues

23

#### EMDR & Substance-use Treatment

 People seeking substance use disorder treatment are highly likely to have experienced multiple adverse events, including childhood and adult events both prior to and during their experience of substance use

(Afifi et al., 2008; Bellis et al., 2019; Dore et al., 2012)

- They are likely to have comorbid mental health symptoms (Marel e al., 2018)
- The presence of previous adversity is related to treatment engagement and outcomes

(Darke et al., 2012; Hyman et al., 2008)



#### EMDR & Substance-use Treatment

• EMDR has good treatment effects on symptoms related to adverse events (or traumatic experiences) in different populations and presentations (not just PTSD)

(Cuijpers et al., 2020; Matthijssen et al., 2020)

 EMDR is additionally efficient, can be implemented with relatively little preparation and doesn't involve homework

(Boterhoven de Haan et al., 2020; Mavranezouli et al., 2020; Shapiro, 2018; van Vliet et al., 2021)

• Trauma focussed treatments are safe and effective to use in a substance use treatment setting (Jarnecke et al., 2019; Simpson et al., 2021)

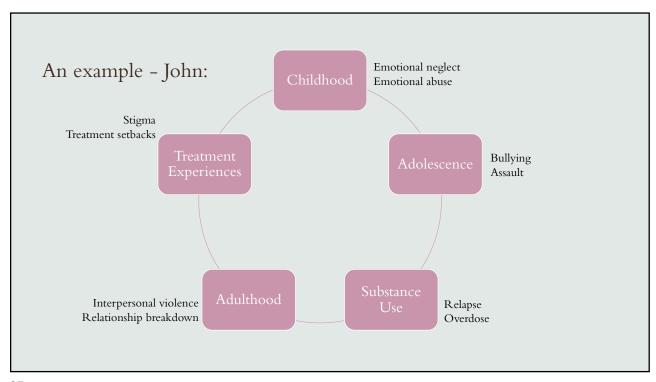
Given this - EMDR seems a useful addition to our existing interventions in this area

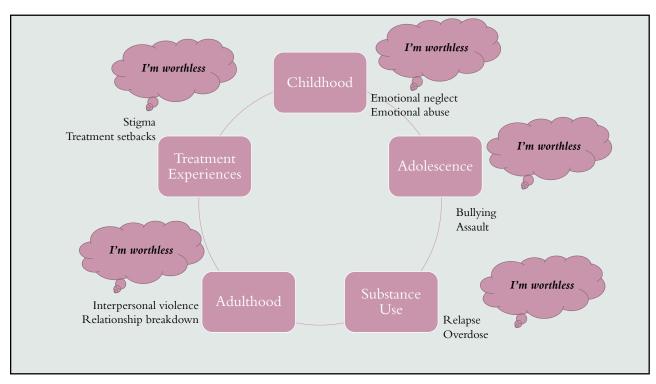
25

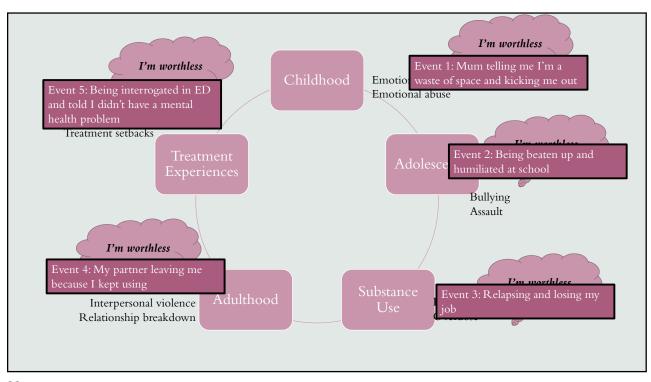
## An example - John:

- John is a 34yo male
- Methamphetamine use
- Depression
- He had a repeating cycle of abstinence, relapse, and depressive symptoms
- He had multiple attempts at treatment
- He had significant issues with his sense of self-worth









EMDR Therapy Phase	Activities
Phase 1-2: History Taking & Preparation	We developed a shared understanding of his past and how his negative self-beliefs had developed John was provided some basic skills and strategies to manage cravings and acute distress He was taught about how EMDR works and what it looks like
Phase 3: Target Assessment	We identified key experiences which most represented the "evidence" for his self-beliefs We activated these memories in session to work with them
Phase 4-7 (Processing)	We engaged in a series of EMDR processing sessions targeting these events
Phase 8: Re-evaluation	Progress was checked at the start of each session Any change in his experience was discussed We monitored the treatment effect on target memories across treatment

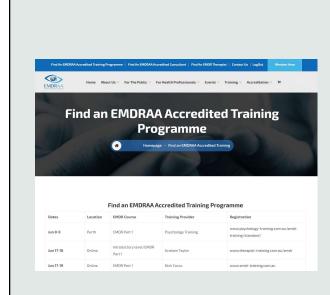
#### What treatment looked like:

- John had multiple relapses
- Therapy was interrupted for periods of days or weeks
- Each relapse was reviewed and discussed did it fit the pattern we had identified? What were the triggers?
- We targeted some *recent events* that reinforced his sense of worthlessness
- We targeted some *feared future events* (*What if I get a new job and struggle:*)
- John was able to increasingly sustain abstinence from methamphetamine
- More importantly he started to recognise his recurrent pattern underlying this this led to a reduction in his depressive symptoms and improved his quality of life greatly

31

## Research underway

- Lortye, S. A., Will, J. P., Marquenie, L. A., Goudriaan, A. E., Arntz, A., & de Waal, M. M. (2021). Treating posttraumatic stress disorder in substance use disorder patients with co-occurring posttraumatic stress disorder: study protocol for a randomized controlled trial to compare the effectiveness of different types and timings of treatment. BMC psychiatry, 21(1), 442. <a href="https://doi.org/10.1186/s12888-021-03366-0">https://doi.org/10.1186/s12888-021-03366-0</a>
- Schäfer, I., Chuey-Ferrer, L., Hofmann, A., Lieberman, P., Mainusch, G., & Lotzin, A. (2017). Effectiveness of EMDR in patients with substance use disorder and comorbid PTSD: study protocol for a randomized controlled trial. BMC psychiatry, 17(1), 95. <a href="https://doi.org/10.1186/s12888-017-1255-9">https://doi.org/10.1186/s12888-017-1255-9</a>
- Valiente-Gómez, A., Moreno-Alcázar, A., Radua, J., Hogg, B., Blanco, L., Lupo, W., Pérez, V., Robles-Martínez, M., Torrens, M., & Amann, B. L. (2019). A Multicenter Phase II Rater-Blinded Randomized Controlled Trial to Compare the Effectiveness of Eye Movement Desensitization Reprocessing Therapy vs. Treatment as Usual in Patients With Substance Use Disorder and History of Psychological Trauma: A Study Design and Protocol. Frontiers in psychiatry, 10, 108. https://doi.org/10.3389/fpsyt.2019.00108



www.emdria.org

# Training?

- EMDR training is overseen by the EMDR Association of Australia
- 50hrs of workshops and case consultation
  - 20hrs didactic (lecture)
  - 20hrs of skills (practicum)
  - 10hrs of case consultation
- Normally two workshops + 10hrs of case consultation

CREATING GLOBAL HEALING, HEALTH & HOPE

33



# Summary

- EMDR Therapy is a trauma-focussed treatment approach
- It is well evidenced in some conditions and has a *developing* evidence base in substance-use treatment both in laboratory and treatment research
- Because of the overlap of addiction and trauma related issues it is a useful treatment approach to help us conceptualise the patterns underlying substance use

35

Thank you!

Questions?



Logan Harvey logan.harvey@sydney.edu.eu



#### References

Affif, T. O., Enns, M. W., Cox, B. J., Asmundson, G. J. G., Stein, M. B., & Sareen, J. (2008). Population Attributable Fractions of Psychiatric Disorders and Suicide Ideation and Attempts Associated With Adverse Childhood Experiences. American Journal of Public Health, 98(5), 946–952. doi:10.2105/ajph.2007.120253

Australian Psychological Society (2018) Evidence based psychological interventions in the treatment of mental disorder – A review of the literature. https://psychology.org.au/psychology/advocacy/position-papers-discussion-papers-and-reviews/psychological-interventions-mental-disorders

Bellis, M. A., Hughes, K., Ford, K., Ramos Rodriguez, G., Sethi, D., & Passmore, J. (2019). Life course health consequences and associated annual costs of adverse childhood experiences across Europe and North America: a systematic review and meta-analysis. The Lancet. Public health, 4(10), e517–e528. https://doi.org/10.1016/S2468-2667(19)30145-8

Boterhoven de Haan, K. L., Lee, C. W., Fassbinder, E., van Es, S. M., Menninga, S., Meewisse, M.-L., Rijkeboer, M., Kousemaker, M., & Arntz, A. (2020). Imagery rescripting and eye movement desensitisation and reprocessing as treatment for adults with post-traumatic stress disorder from childhood trauma: randomised clinical trial. The British Journal of Psychiatry, 217(5), 609-615. https://doi.org/10.1192/bjp.2020.158

Cuijpers, P., van Veen, S.C., Sijbrandij, M., Yoder, W., & Cristea, I.A. (2020). Eye movement desensitization and reprocessing for mental health problems: a systematic review and meta-analysis. Cognitive Behavior Therapy, 49(3) 165-180

37

#### References

Darke, S., Campbell, G., & Popple, G. (2012). Retention, early dropout and treatment completion among therapeutic community admissions. Drug Alcohol Rev, 31(1), 64-71. doi:10.1111/j.1465-3362.2011.00298.x

de Voogd, L.D., Kanen, J.W., Neville, D.A., Roelofs, K., Fernandez, G., & Hermans, E.J. (2018). Eye-movement intervention enhances extinction via Amygdala deactivation. The Journal of Neuroscience, 38(40), 8694-8706

Dominguez, S.K., Matthijssen, S.J.M.A., Lee, C.W. (2021). Trauma-focused treatments for depression. A systematic review and meta-analysis. PLoS ONE. 16(7).

Dore, G., Mills, K. L., Murray, R., Teesson, M., & Farrugia, P. (2012). Post-traumatic stress disorder, depression and suicidality in inpatients with substance use disorders. Drug and Alcohol Review, 31(3), 294-302. doi:doi:10.1111/j.1465-3362.2011.00314.x

Enghelhard, I.M., McNally, R.J., van Schie, K. (2019). Retrieving and modifying traumatic memories: recent research relevant to three controversies. Current Directions in Psychological Science, 28(1), 91-96

Houben, S.T.L., Otgaar, H., Roelofs, J., Merckelbach, H., & Muris, P. (2020). The effects of eye movements and alternative dual tasks on the vividness and emotionality of negative autobiographical memories: A meta-analysis of laboratory studies. Journal of Experimental Psychopathology, 11(1), 1-14

#### References

Hyman, S. M., Paliwal, P., Chaplin, T. M., Mazure, C. M., Rounsaville, B. J., & Sinha, R. (2008). Severity of childhood trauma is predictive of cocaine relapse outcomes in women but not men. Drug and Alcohol Dependence, 92(1), 208-216. doi:https://doi.org/10.1016/j.drugalcdep.2007.08.006

Jarnecke, A. M., Allan, N. P., Badour, C. L., Flanagan, J. C., Killeen, T. K., & Back, S. E. (2019). Substance use disorders and PTSD: Examining substance use, PTSD symptoms, and dropout following imaginal exposure. Addict Behav, 90, 35-39. https://doi.org/10.1016/j.addbeh.2018.10.020

Lee, C.W. & Cuijpers, P. (2013) A meta-analysis of the contribution of eye movements in processing emotional memories. Journal of Behavior Therapy and Experimental Psychiatry, 44, 231-239

Lee, C. W., Taylor, G., & Drummond, P. D. (2006). The active ingredient in EMDR: is it traditional exposure or dual focus of attention? Clinical Psychology & Psychotherapy, 13(2), 97-107. https://doi.org/10.1002/cpp.479

Littel, M., van den Hout, M.A., & Engelhard, I. M. (2016). Desensitizing Addiction: Using Eye Movements to Reduce the Intensity of Substance-Related Mental Imagery and Craving. Front Psychiatry, 7, 14. <a href="https://doi.org/10.3389/fpsyt.2016.00014">https://doi.org/10.3389/fpsyt.2016.00014</a> https://doi.org/10.1891/1933-3196.11.1.3

39

#### References

Marel, C., Mills, K. L., Kingston, R. E. F., Gournay, K., Deady, M., Kay-Lambkin, F.J., Baker, A. L., & Teesson, M. (2016). Guidelines on the management of co-occurring alcohol and other drug and mental health conditions in alcohol and other drug treatment settings (2nd ed.). Centre of Research Excellence in Mental Health and Substance Use, National Drug and Alcohol Research Centre, University of New South

Markus, W., & Hornsveld, H. K. (2017). EMDR Interventions in Addiction. Journal of EMDR Practice and Research, 11(1), 3-29.

Markus, W., de Weert-van Oene, G. H., Woud, M. L., Becker, E. S., & DeJong, C. A. J. (2016). Are addiction-related memories malleable by working memory competition? Transient effects on memory vividness and nicotine craving in a randomized lab experiment. J Behav Ther Exp Psychiatry, 52, 83–91. https://doi.org/10.1016/j.jbtep.2016.03.007

Matthijssen, S. J. M. A., Lee, C. W., de Roos, C., Barron, I. G., Jarero, I., Shapiro, E., Hurley, E. C., Schubert, S. J., Baptist, J., Amann, B. L., Moreno-Alcázar, A., Tesarz, J., & de Jongh, A. (2020). The Current Status of EMDR Therapy, Specific Target Areas, and Goals for the Future. J EMDR Prac Res(4), 241–284. https://doi.org/10.1891/EMDR-D-20-00039

Mavranezouli, I., Megnin-Viggars, O., Grey, N., Bhutani, G., Leach, J., Daly, C., Dias, S., Welton, N. J., Katona, C., El-Leithy, S., Greenberg, N., Stockton, S., & Pilling, S. (2020). Cost-effectiveness of psychological treatments for post-traumatic stress disorder in adults. PLOS ONE, 15(4), e0232245. https://doi.org/10.1371/journal.pone.0232245

National Institute for Health and Care Excellence (2018). Post-traumatic stress disorder. https://www.nice.org.uk/guidance/ng116.

#### References

Novo Navarro, P., Landin-Romero, R., Guardiola-Wanden-Berghe, R., Moreno-Alcázar, A., Valiente-Gómez, A., Lupo, W., García, F., Fernández, I., Pérez, V., & Amann, B. L. (2018). 25 years of Eye Movement Desensitization and Reprocessing (EMDR): The EMDR therapy protocol, hypotheses of its mechanism of action and a systematic review of its efficacy in the treatment of post-traumatic stress disorder. Revista de Psiquiatría y Salud Mental (English Edition), 11(2), 101-114. https://doi.org/https://doi.org/10.1016/j.rpsmen.2015.12.002

Perlini, C., Donisi, V., Rossetti, M. G., Moltrasio, C., Bellani, M., & Brambilla, P. (2020). The potential role of EMDR on trauma in affective disorders: A narrative review. Journal of Affective Disorders, 269, 1-11. https://doi.org/https://doi.org/10.1016/j.jad.2020.03.001

Phoenix Australia (2021) Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex PTSD

Schubert, S., & Lee, C.W. (2009). Adult PTSD and Its Treatment With EMDR: A Review of Controversies, Evidence, and Theoretical Knowledge. Journal of EMDR Practice and Research, 3(3), 117–132. https://doi.org/10.1891/1933-3196.3.3.117

Shapiro, F. (2001) Eye movement desensitisation and reprocessing: Basic principles, protocols, and procedures. (2nd ed). Guilford.

Shapiro, F. (2018). Eye Movement Desensitization and Reprocessing (EMDR): Basic principles, protocols, and procedures (3rd ed.). Guildford.

41

#### References

Simpson, T. L., Goldberg, S. B., Louden, D. K. N., Blakey, S. M., Hawn, S. E., Lott, A., Browne, K. C., Lehavot, K., & Kaysen, D. (2021). Efficacy and acceptability of interventions for co-occurring PTSD and SUD: A meta-analysis. Journal of Anxiety Disorders, 84, 102490. https://doi.org/10.1016/j.janxdis.2021.102490

Stickgold, R. (2002). EMDR: a putative neurobiological mechanism of action. J Clin Psychol, 58(1), 61-75. https://doi.org/10.1002/jclp.1129

Tapia, G. (2019). Review of EMDR Interventions for Individuals With Substance Use Disorder With/Without Comorbid Posttraumatic Stress Disorder. Journal of EMDR Practice and Research, 13(4), 345-353. https://doi.org/10.1891/1933-3196.13.4.345

van Veen, S.C., Kang, S., & van Schie, K (2019) On EMDR: Measuring the working memory taxation of various types of eye(non) movement conditions. *Journal of Behavior Therapy and Experimental Psychiatry*, 65

van Vliet, N. I., Huntjens, R. J. C., van Dijk, M. K., Bachrach, N., Meewisse, M.-L., & de Jongh, A. (2021). Phase-based treatment versus immediate trauma-focused treatment for post-traumatic stress disorder due to childhood abuse: randomised clinical trial. BJPsych Open, 7(6), e211, Article e211. https://doi.org/10.1192/bjo.2021.1057

Valiente-Gomez, A., Moreno-Alcazar, A., Treen, D., Cedron, C., Colom, F., Perez, V., & Amann, B. L. (2017). EMDR beyond PTSD: A Systematic Literature Review. Front Psychol, 8, 1668. https://doi.org/10.3389/fpsyg.2017.01668

World Health Organization. (2013). Guidelines for the management of conditions specifically related to stress. Geneva, Switzerland: Author.