

Complex intervention development: a positive focused mindfulness group intervention compared to healthy living after TBI

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Disclosures

Presenter has no interest to disclose.



Problem identification

- Intervention science after TBI needs further development & tailoring for broad application around the world
- Depression after TBI is real and without effective non-pharmacological interventions
- Self-management of chronic stress and symptoms may be helpful to limit depression severity

Complex interventions may be a solution to help solve complex problems

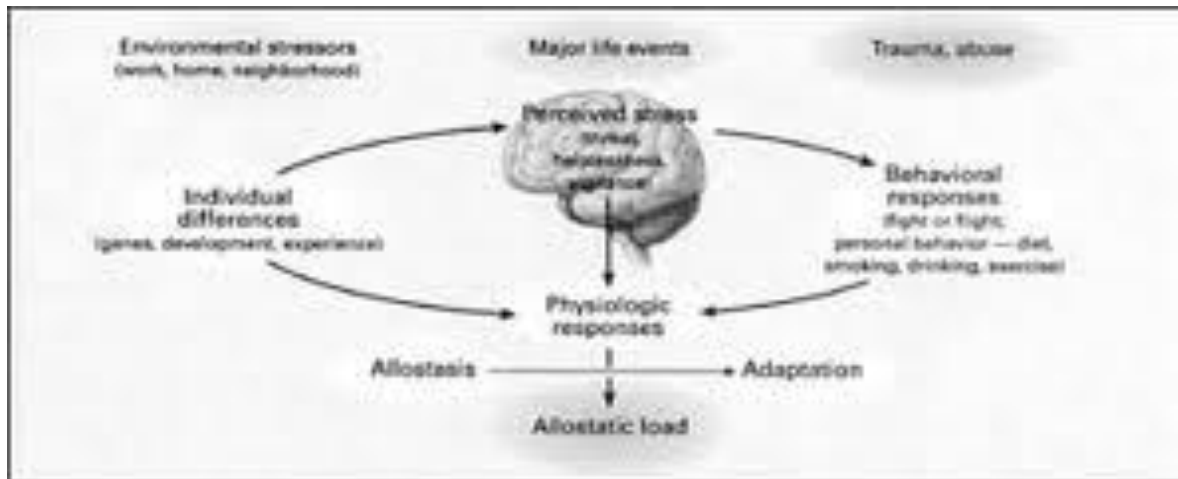
Allostasis



Allostatic load



Restoring balance through self-management of symptoms & stress





Purpose

- To evaluate whether a group mindfulness meditation complex intervention (in person and boosted with telephone support) compared to a healthy living after TBI complex parallel intervention can lower depressive or TBI symptoms, chronic stress and improve psychological functioning

Design & sample

- Pilot study with 25 persons with mild to moderate TBI who were recruited from outpatient rehabilitation programs in the MidWest
- Randomized 2-group design, brief longitudinal: baseline, 8-week & 12 week
- Parallel interventions were compared



Metrics & outcomes

- Rivermead (symptoms) (T1, T2, & T3)
- Depressive symptoms (CES-D & Hamilton) (T1, T2, & T3)
- Psychological functioning (PCRS subscales of interpersonal and emotional functioning) (T1, T2, & T3)
- Perceived psychological stress (PSS-10) (T1, T2, & T3)
- Program evaluation (acceptability & satisfaction at T3)

Recruitment & retention

- Neuropsychologist referral
- Internal clinic personnel adjusted their therapy schedules
- Telephone & written reminders
- Snow day
- 78 persons approached, 33 joined, 25 completed

Protocols

Healthy Living after TBI	Mindfulness group therapy
Stress reduction methods for healthy living & brain effects	Positive body awareness: walking, listening, tasting, emphasis on breathing
Nutrition and the brain: healthy eating	Body scan and mindfulness
Exercise and the brain: achieving balance	Developing your mantra and meditation
Sleep hygiene for persons with TBI	Compassion meditation
Followed by 4 weeks of telephone booster session by group	Followed by 4 weeks of telephone booster session by group



Delivery & fidelity

- Trained mental health experts with standardized protocol
- Delivered content in small groups: 5-6 persons from same clinic
- Non-biased observer
- Telephone interventions were recorded
- 90 minutes for live classes; 60 minutes for telephone
- Assessed attendance and practice at home



Outcome variable	Pre-intervention Mean (SD)	8-week post-Intervention Mean (SD)	T-Statistic (df)	Sig	Effect Size
CES-D*					
M	27.29 (14.9)	17.64 (09.28)	3.27 (13)	.006	.37
H	29.45 (17.8)	28.00 (15.57)	0.53 (10)	NS	
PSS-10**					
M	21.64 (7.9)	14.21 (6.87)	3.01 (13)	.01	.35
H	20.90 (6.32)	19.27 (6.48)	0.96 (10)	NS	
Psych Function***					
M	53.28 (7.80)	56.64 (6.89)	1.70 (13)	NS	.40
H	50.73 (8.27)	50.00 (8.16)	0.56 (10)	NS	
Rivermead****					
M	35.36 (13.72)	27.57 (12.9)	4.20 (13)	.001	.16
H	30.97 (9.8)	31.27 (9.22)	0.23 (10)	NS	

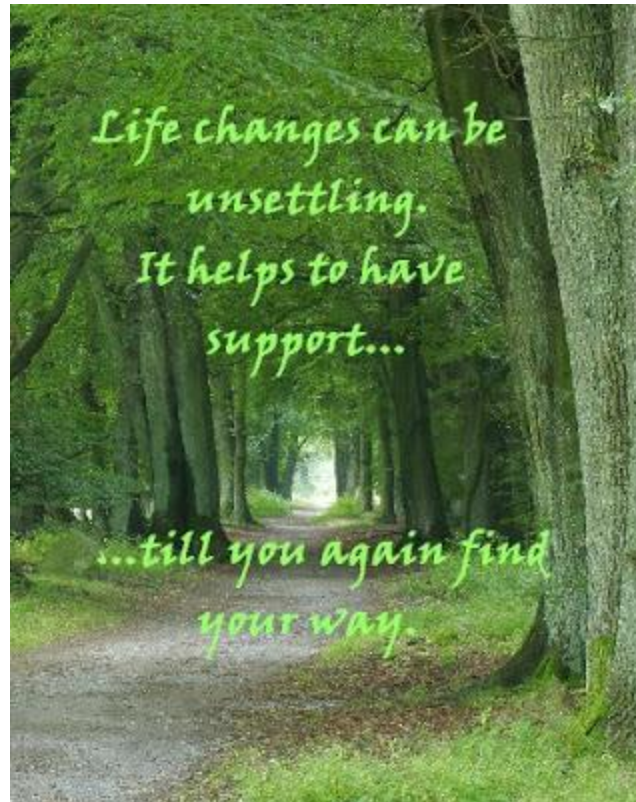


Results



Conclusion

Self-management helps support the changes



Questions???

