

Impact case study (REF3)

Institution: Bournemouth University		
Unit of Assessment: 3		
Title of case study: Emotional processing and its impact on mental and physical health		
Period when the underpinning research was undertaken: 2004 – 2015		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Professor Roger Baker	Visiting Professor of Clinical Psychology	1998 - current
Professor Peter Thomas	Professor of Health Care Statistics & Epidemiology	1996 - 2020
Dr Sarah Thomas	Deputy Director of BUCRU and Senior Research Fellow	2017- current
Period when the claimed impact occurred: 2013 – 31 December 2020		
Is this case study continued from a case study submitted in 2014? No		
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Difficult life events can have a significant emotional impact. Emotional processing refers to the way in which people accommodate that impact. The team at Bournemouth University (BU), led by Professor Baker, have investigated how people process emotional experiences and what impact this has on mental and physical health. They developed the Emotional Processing Scale (EPS), which has been translated into 19 languages. The scale has been used by clinicians, educators and researchers worldwide in the diagnosis and treatment of a range of patients and by Baker to develop the Emotional Processing Model and to advance Emotional Processing Therapy.</p>		
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>In the late 1970s, panic attacks were beginning to be distinguished from other anxiety conditions. Baker began to see a connection between peoples' physical symptoms and the way they emotionally processed earlier stressful events [R1]. This research highlighted a need for a psychometric scale that was able to assess the different aspects of emotional processing; and that emotional avoidance and suppression also related to other anxiety disorders and depression. Emotional Processing [R2] is a type of natural healing, protecting people from emotional distress. Not everyone will process events successfully. There are some emotional processing styles that inhibit successful processing and could contribute towards psychological disorders or psychogenic conditions including physical illnesses which have a psychological cause.</p> <p>With a project team and clinicians on board, the development and refinement of the Emotional Processing Scale (EPS) began in 2000. EPS research findings indicated that nearly every psychological disorder studied revealed significant difficulties with emotional processing - a finding paralleled in alexithymia (inability to recognise emotions) literature. It became evident that it could be applied widely to other health conditions. Through a process</p>		

of iteration and evaluation of validity [R3, R4], the team produced continuously improving versions of the questionnaire allowing identification and measurement of critical dimensions of emotional processing for both patients and healthy individuals.

In 2012, the team collaborated globally with 70 research groups in developing a wide range of cultural, diagnostic and healthy norms [R5]. 27 researchers submitted data from 7,113 people, which explored the link between emotion suppression and a wide range of psychological conditions and physical illnesses. The final EPS consisted of 25 questions, covering five different dimensions [R5]. The scale is unique in that it provides a practical and simple measure of quite complex emotional processes relevant to psychological therapy, psychopathology, medicine and everyday life. The EPS was published in 2015 and is available in both physical and digital formats. It has been translated into 19 languages and been used to assess the emotional experiences of healthy and unwell people globally.

Emotional processing represents a revolution in thinking, as it offers an alternative approach to diagnoses of psychiatric illnesses. Problematic styles of emotional processing are implicated in nearly every type of clinical condition, from psychological disorders, to medical conditions without organic pathology, to purely medical conditions. Additionally, it is compatible with cognitive therapy but draws on traditions which emphasise predominantly emotional factors like trauma and life events.

The development of EPS has enabled clinicians to identify patients for therapy and measure change in significant emotional dimensions during therapy. Not only has it directly led to the development of emotion-based therapies in post-traumatic stress disorder (PTSD), tinnitus and psychogenic epilepsy, but Emotional Processing Therapy can be seen as a possible solution to some of the practical difficulties inherent in implementing prolonged exposure for PTSD. A process evaluation of this new approach shows promise [R6].

3. References to the research (indicative maximum of six references)

R1, R2, R3, R4 & R6 have been rigorously peer reviewed in internationally recognised journals. R5 has been reviewed by The British Psychological Society and scored 4*.

R1. Baker, R., Holloway, J., Thomas, P.W., Thomas, S. and Owens, M., (2004). Emotional processing and panic. *Behaviour research and therapy*, 42(11) pp.1271-1287. <https://psycnet.apa.org/doi/10.1016/j.brat.2003.09.002>

R2. Baker, R., Thomas, S., Thomas, P.W., Owens, M. (2007). Development of an Emotional Processing Scale. *Journal of Psychosomatic Research*, 62 pp.167-178. <https://doi.org/10.1016/j.jpsychores.2006.09.005>

R3. Baker, R., Thomas, S., Thomas, P.W., Gower, P., Santonastaso, M. and Whittlesea, A., (2010). The Emotional Processing Scale: scale refinement and abridgement (EPS-25). *Journal of psychosomatic research*, 68(1) pp.83-88. <https://doi.org/10.1016/j.jpsychores.2009.07.007>

R4. Baker, R., Owens, M., Thomas, S., Whittlesea, A., Abbey, G., Gower, P., Tosunlar, L., Corrigan, E. and Thomas, P.W., (2012). Does CBT facilitate emotional processing? *Behavioural and Cognitive Psychotherapy*, 40(1) pp.19-37. <https://psycnet.apa.org/doi/10.1017/S1352465810000895>

R5. Baker, R., Thomas, P., Thomas, S., Santonastaso, M. and Corrigan, E., (2015). The emotional processing scale. Oxford, UK: Hogrefe. <http://emotionalprocessingscale.org/>

R6. Baker, R., Gale, L., Abbey, G. and Thomas, S., (2013). Emotional Processing Therapy for post-traumatic stress disorder. *Counselling Psychology Quarterly*, 26(3-4) pp.362-385. <https://psycnet.apa.org/doi/10.1080/09515070.2013.816840>

4. Details of the impact (indicative maximum 750 words)**Healthcare guidelines and policy**

The Emotional Processing Scale [R5] has received a 4/4 star (Excellent) evaluation from the British Psychological Society (BPS) who concluded: “The EPS is spearheading a revolution in thinking to overcome the limitations imposed by the ‘medical model’, to which emotional processing offers an alternative approach...The development of an emotional processing scale makes it possible to explore more fully the contributory role of key emotional factors in psychopathology and psychological therapy.” [E1] The test review process provides clinicians with reassurance that tests meet certain quality standards and has led to BPS Registered Test status.

Use in the UK

The EPS is used as a tool to diagnose and treat people with a variety of physical, behavioural, and emotional pathologies all over the UK. The Emotional Processing Model is used by clinicians and in teaching. Examples include the following:

- A psychologist who formerly worked with the Dorset Youth Offending Team described the EPS as “an immensely useful tool...a device to describe, to educate and to inform therapeutic endeavour...Clients do seem to recognise themselves in the results...it can offer implicit permissions and directions in how to most healthily manage emotions.”[E2] A Consultant Clinical Neuropsychologist, Dorset HealthCare University Foundation Trust, describes “...an invaluable tool... an essential contribution to the modern and holistic understanding of the mind-body paradigm...”[E3]
- The EPS has been used in treating patients with non-epileptic seizures at the Specialist Neurology Psychotherapy Service at Sheffield. Use of the scale showed that patients had deficits in emotional processing compared to healthy controls and informed a therapeutic approach to help resolve symptoms. The scale was used again after treatment to demonstrate its effectiveness [E4].
- The Open University invited Professor Baker to contribute material on panic attacks, based on his Emotional Processing Model, for their new MSc in Psychology. The material was subsequently repurposed for their OpenLearn Platform, where it has had 31,683 unique visits since March 2019, with 4,166 people completing the course [E5]. A Senior Lecturer from The Open University says: “evidence suggests that this has been a very successful course, reaching a large number of people in a meaningful way” and that “course reviews to date are wholly positive” [E5].

A global resource

Internationally, adoption and impact of the scale and therapy continues to rise. The EPS has been translated into 19 languages (Chinese, Egyptian Arabic, French, French Canadian, Hindi, Italian, Japanese, Marathi, Polish, Portuguese, Persian, Brazilian Portuguese, Spanish, Swedish, Danish, Dutch, Urdu, Macedonian, Farsi and German). Examples of its use include:

- A former NHS Tinnitus therapist who researched emotional processing and the EPS for her PhD now uses it in her practice treating people with tinnitus in France. She says: “The Emotional Processing Model (Baker 2001) provided an explanatory conceptual perspective for my clinical observations.” [E6] She uses the model and scale to help patients understand the role of emotional processing in tinnitus distress, to identify their emotional processing style and inform the subsequent therapy which “enables emotional processing of the experience of tinnitus and thus, resolution of distress.” [E6]
- A Polish psychologist, working at Rehabilitacja Wisniewski, states: “In my practice I often use the idea of emotional processing to understand how people deal with their emotional experience. As I work mainly with people suffering from cancer or other life-threatening conditions in the terminal phase of their illness, there is a huge importance to help them express and regulate their emotions.” [E7]

- The EPS and Emotional Processing Model is being taught as part of the Master's in Military Psychology at the University of Rome with "great feedback" as well as to undergraduate classes. The Italian version of the EPS is being used with adolescents in order to "apply emotional processing constructs in a practical way to adolescent populations and so generally extend the applicability of the scale." [E8]
- Professor Baker's three research-informed self-help books, published by Lion Hudson, have, between them, sold over 90,000 copies worldwide to date, with over 13,000 copies sold in the impact period [E9]. They have been translated into French, German, Polish and Czech. They continue to receive positive reviews, with the two books on Amazon receiving 4.6 and 4.9 out of 5 stars. Verified purchaser reviews for *Understanding Panic Attacks and Overcoming Fear* include in 2018: "Best book ever if you suffer from panic attacks... I have bought this book 5 times in the past few years and given them to people who suffer panic attacks also. It breaks everything down, why you feel the way you feel and how to overcome it, if I ever feel panic feelings coming on, I just read it again. I would recommend this to everyone." And in 2019: "My doctor told me to buy this book. It certainly worked for me." [E10]

5. Sources to corroborate the impact (indicative maximum of 10 references)

E1. The British Psychological Society, Psychological Test Centre (2016) *Test Review: Emotional Processing Scale*. [online] The British Psychological Society. Available at: <https://ptc.bps.org.uk/test-review/emotional-processing-scale-0>. [Accessed 26 January 2017].

E2. Psychological Consultation and Therapy Service (2019) *Testimonial letter*.

E3. Hogrefe.com. n.d. *EPS - Emotional Processing Scale – Hogrefe - Online Testing, Psychometric Test & Training Providers*. [online] Available at: <https://www.hogrefe.com/uk/shop/emotional-processing-scale.html> p.3. [Accessed 15 January 2019].

E4. Howlett, S., Reuber, M., Novakova, B. and Williams, I., n.d. *Emotional Processing In Patients With Psychogenic Non-Epileptic Seizures And The Implications For Treatment*.

E5. Open University (2020) *Testimonial letter*.

E6. Tinnitus psychotherapist (2020) *Testimonial letter*.

E7. Psychologist, Rehabilitacja Wisniewski (2020) *Testimonial letter*.

E8. University of Rome, (2020) *Testimonial letter*.

E9. Lion-Hudson, Baker. R. (2020) *Sales data*.

E10a.

- Baker, R. (2007) *Emotional processing: Healing through feeling*. Oxford: Lion-Hudson.
- Baker, R. (2010) *Understanding Trauma: how to overcome post-traumatic stress*. Oxford: Lion-Hudson.
- Baker, R. (2011) *Understanding panic attacks and overcoming fear*. Oxford: Lion-Hudson.

E10b. Amazon.co.uk. n.d. *Understanding Panic Attacks: Roger Baker*. [online] Available at: <https://www.amazon.co.uk/Understanding-Panic-Attacks-Roger-Baker-ebook/dp/B004X1HHSU> [Accessed 12 December 2020].