

**Impact case study (REF3b)**

<p><b>Institution:</b> University College London</p>
<p><b>Unit of Assessment:</b> 4 - Psychology, Psychiatry and Neuroscience</p>
<p><b>Title of case study:</b> Using research on mentalising (theory of mind) to improve outcomes of suicidality, self-harm, violence and the functioning of social and mental health care teams</p>
<p><b>1. Summary of the impact</b></p> <p>The pioneering work undertaken at UCL has had a major impact on clinical practice for the treatment of self-harming, suicidal patients with a diagnosis of borderline personality disorder and the techniques have been drawn on in extensions to other common mental disorders including eating disorder, substance misuse, and antisocial personality disorder. This treatment, known as mentalisation based therapy or MBT, has since been applied in a range of clinical settings including inpatient and outpatient work in the UK and internationally. This case study presents two areas in particular where our research has been applied: the treatment of personality disorders, and in work with troubled adolescents.</p> <p><b>2. Underpinning research</b></p> <p>Research on mentalising (theory of mind) led by Professor Peter Fonagy, Professor Anthony Bateman and Dr Patrick Luyten has underpinned a revolution in the treatment of people with borderline personality disorder (BPD). Previously, there were no effective psychotherapies for BPD, which is characterised by difficulties with emotion regulation and impulse control, and unstable relationships and self-image. Only behaviour therapy had an evidence base.</p> <p>The research originated in the 1990s when Fonagy and colleagues discovered that juvenile diabetics with poor insulin control struggled to depict their social experiences accurately in mental state terms and that this lack of ‘mentalising’ capacity meant they often could not predict the consequences of their own and others’ actions. Listening to them talk about their feelings and their understanding of feelings dramatically improved their diabetic control (measured through glycosylated haemoglobin levels). Clinical work both with these young people and BPD patients suggested that failure of mentalising often followed a combination of early neglect and childhood trauma.</p> <p>This clinical discovery was informed by empirical research showing that the development of theory of mind is mediated partly by social relationships and not, as previously thought, only via genetic transmission. When a person’s ability to depict intention in mental state terms is limited, they tend to act rather than communicate, and have distorted expectations of others. We developed a manualised form of psychodynamic psychotherapy known as Mentalisation Based Treatment (MBT) specifically to address this deficit [1]. MBT engages clients in understanding their own and others’ actions in realistic and accurate mental state terms.</p> <p>MBT has been subjected to rigorous empirical scrutiny that has demonstrated its effectiveness and cost-effectiveness in a day hospital setting. It has been shown to reduce hospitalisation, suicide and self-harm by 55% compared to a control group, which showed limited change or deterioration over the same period [1]. An improvement in depressive symptoms, a decrease in suicidal and self-mutilatory acts, reduced in-patient days and better social and interpersonal function began at six months and lasted until the end of treatment at 18 months. The differences between MBT and comparison groups in suicidality, diagnostic status, service use, use of medication, global functioning and vocational status were maintained for 8 years following randomisation [2]. An analysis of health service utilisation costs for BPD showed that mentalisation-based partial hospitalisation was no more expensive than treatment as usual and resulted in considerable cost savings after treatment.</p> <p>Although MBT was originally designed for BPD, we have also collaborated with other researchers to adapt it for use with other clinical populations including at-risk mothers of infants; eating disorders; depression; trauma; drug addiction; and adolescent breakdown. In addition to being used in a traditional two-person therapeutic context, MBT has also been extended to a family context [3] and system-wide contexts (e.g. schools [4]). RCTs have confirmed the effectiveness of</p>

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adaptations of MBT for BPD outpatients [5], aggression in school settings [4] and self-harming adolescents [3]. Currently MBT is the only treatment that has been shown to have benefit in self-harming in adolescence. Recently we have explored the neural mechanisms underpinning the mentalisation deficit in BPD patients in an imaging study of trust and social exchange where the participants were imaged simultaneously and demonstrated deficits in interpersonal understanding [6]. The model is fully developed in [7].

**3. References to the research**

- [1] Bateman A, Fonagy P. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: A randomized controlled trial. *American Journal of Psychiatry*. 1999 October;156(10):1563-1569. <http://ajp.psychiatryonline.org/article.aspx?articleid=173741>
- [2] Bateman A, Fonagy P. 8-year follow-up of patients treated for borderline personality disorder: Mentalization-based treatment versus treatment as usual. *American Journal of Psychiatry*. 2008 May;165(5):631-8. <http://dx.doi.org/10.1176/appi.ajp.2007.07040636>
- [3] Rossouw TI, Fonagy P. Mentalization-based treatment for self-harm in adolescents: A randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2012 Dec;51(12):1304-1313.e3. <http://dx.doi.org/10.1016/j.jaac.2012.09.018>
- [4] Twemlow SW, Fonagy P, Sacco FC, Gies ML, Evans R, Ewbank R. Creating a peaceful school learning environment: A controlled study of an elementary school intervention to reduce violence. *American Journal of Psychiatry*. 2001 May;158(5):808-10. <http://dx.doi.org/10.1176/appi.ajp.158.5.808>
- [5] Bateman A, Fonagy P. Randomized controlled trial of outpatient mentalization-based treatment versus structured clinical management for borderline personality disorder. *American Journal of Psychiatry* 2009. 2009 Dec;166(12):1355-64. <http://dx.doi.org/10.1176/appi.ajp.2009.09040539>
- [6] King-Casas B, Sharp C, Lomax-Bream L, Lohrenz T, Fonagy P, Montague PR. The rupture and repair of cooperation in borderline personality disorder. *Science*. 2008 Aug 8;321(5890):806-10. <http://dx.doi.org/10.1126/science.1156902>
- [7] Fonagy P, Luyten P. A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Dev Psychopathol*. 2009 Fall;21(4):1355-81. <http://dx.doi.org/10.1017/S0954579409990198>.

**4. Details of the impact**

Since we first developed the MBT model of intervention, we have actively disseminated the research through publications, presentations and training programmes. As a result, thousands of clinicians are delivering mentalisation-based therapies around the world.

The original treatment method is described in two books, with applications of the method in different settings and with different age groups and clinical populations described in two recent books which have sold more than 10,000 copies to date [a]. Since 1999, Fonagy and Bateman have given a substantial number of high profile presentations to clinical groups. In the period 2008–13 this amounted to 55 keynote speeches in the UK and 154 internationally. They have also given a number of online presentations, which have been uploaded onto YouTube and have received more than 20,000 hits [b]. We originally established training courses at the Anna Freud Centre (AFC) in London. Courses are very popular and 50 places sell out within 40 minutes of going online. To cope with the huge demand we have now set up courses and training centres across the world including at UCLA in Los Angeles, McLean Hospital in Massachusetts, the Menninger Clinic in Houston, at the University of Oslo, at the de Viersprong Centre in the Netherlands and at the University of Geneva in Switzerland [c]. Since 2008, 1,703 practitioners have been trained in basic MBT, 384 in advanced MBT and 49 in MBT skills. 369 practitioners have been trained in MBT-F, an application of the model to work with families, and 148 in MBT-A. 159 practitioners have attended other AFC courses including a mentalisation component [d].

**Treatment of Borderline Personality Disorder**

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Before our research, Borderline Personality Disorder (BPD) was often regarded as untreatable and was either not treated at all or poorly treated through Accident & Emergency, inappropriate admissions to inpatient wards, or by community team staff who often lacked the skills to work with these patients, at great cost to the NHS (*Personality Disorder: No Longer a Diagnosis of Exclusion*, NIMHE 2003). In 2002, a questionnaire issued to all Trusts in England providing general adult mental health services found that only 17% of trusts provided a dedicated personality disorder service, and there was no consensus that there was a need to cater for this group.

Mentalisation failure is now globally acknowledged to be a key concept in understanding therapeutic change in patients with BPD. It is recommended in clinical guidelines for BPD in a range of countries: in the UK it is recommended by the National Institute for Health and Clinical Excellence (CG 78); in the US, by the American Psychiatric Association; in Australia by the National Health and Medical Research Council, as well as in guidelines in Spain, Italy and the Netherlands [e]. A large number of trusts in the UK now offer specific MBT services for people with PD, as do at least eight major centres internationally (Harvard, Mt Sinai, UCLA, Texas Med Centre, University of Geneva, University of Oslo, De Viersprong in the Netherlands, New Zealand, Mexico, Sweden, Hungary) [f]. We asked managers of a sample of the UK teams where some staff had been trained in MBT to complete a survey on the use of the intervention in their teams. The response from 22 teams (72% response rate) confirmed that the treatment was being offered on average to 59% of patients in trained settings with the interquartile range percentage between 50% and 72%.

MBT benefits patients not only by reducing self-harming and self-injurious behaviour, but also by reducing the risk of iatrogenic harm from psychotherapy. There is also evidence to suggest that MBT achieves changes in social functioning, increasing the chance of meaningful employment, full time education and reducing reliance on health and social services. Families also benefit from the improved outcomes of their parents and siblings after MBT [g].

**The AMBIT approach: working with troubled adolescents**

In 2010 we developed a mentalisation-based integrative treatment framework for acute, intensive, home and community-based interventions for highly troubled and socially excluded young people (Adolescent Mentalisation-Based Integrative Treatment, or AMBIT) in which to date 750 professionals from more than 50 NHS and voluntary sector teams from across the UK have been trained [d]. Practitioners are now using the this approach in Edinburgh, Derry, Belfast, Plymouth, Norfolk and services in London and the south east of England.

Evidence from services who have implemented the approach training clinicians to focus on mentalisation in their face-to-face, inter-professional and interagency work showed that the improvements in practitioner skills that come with the AMBIT method make a difference to the mental health and wellbeing of young people and their families. For example, the Adolescent Multi-Agency Support Service (AMASS) in Islington, north London, followed up 120 families with adolescents on the edge of care and found that the number of out of home placements dramatically dropped and there were significant reductions in aggression, violence in the home and in family relationships, as well as substantially reduced mental health needs [h].

In the London Borough of Camden, a new 'transformation team' is developing a locality-wide approach to troubled families [i]. The Cambridgeshire Adolescent Substance Use Service (CASUS) adopted the AMBIT approach in 2009. A recent assessment showed that it resulted in reductions in substance use, improvements in psychological well-being, and positive progress in associated peer group and familial problems [j]. We have also recently been commissioned to train 12 teams in Belfast covering the entire Social Services Team, including inpatient care, outreach teams and youth offending teams. These serve the whole of Belfast and some of the surrounding area. Voluntary organisation MAC-UK, which runs an anti-gang violence street-therapy youth programme, has also based its approach on the AMBIT model [k].

In 2012, the AMBIT approach was awarded a Guardian/Virgin Media Innovation Nation Award for Innovation in Collaboration [l]. The citation said: "AMBIT's innovative open source treatment approach radically improves knowledge sharing across NHS and voluntary sector teams."

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## 5. Sources to corroborate the impact

- [a] Sales figures can be corroborated by the Director of Marketing & Sales, American Psychiatric Press. Contact details provided.
- Allen JG, Fonagy P, Bateman AW: Mentalizing in clinical practice. Washington, DC, American Psychiatric Publishing, 2008.
  - Bateman AW, Fonagy P, editors. Mentalizing in Mental Health Practice. Washington: American Psychiatric Press, Inc; 2012.
- [b] Links to YouTube presentations.
- <http://www.youtube.com/watch?v=ilpD1ZtdbFs> (7,017 views)
  - <http://www.youtube.com/watch?v=oebolKNV3PQ> (5,399 views)
  - <http://www.youtube.com/watch?v=rI7sQwY3xu0> (2,912 views)
  - <http://www.youtube.com/watch?v=rrlbb92samk> (2,807 views)
  - <http://www.youtube.com/watch?v=IRLe-9MzU2g> (2,801 views)
- [c] Examples of clinics worldwide offering training in MBT:
- Anna Freud Centre, London: <http://bit.ly/1bQSfmk>
  - McLean Hospital, Harvard Medical School. <http://bit.ly/18nYxJl>
  - Yale School of Medicine. <http://childstudycenter.yale.edu/news/article.aspx?id=2537>
  - Finn Skarderud, Institute for Mentalizing, Norway <http://bit.ly/1aRt2nf>
- [d] Numbers of participants can be corroborated by the Short Courses and Conference Coordinator. Contact details provided. Information about our courses is available here: <http://annafreud.client.fatbeehive.com/shortcourses.php>
- [e] Guidelines recommending MBT for BPD:
- UK: National Institute of Health and Clinical Excellence (2009). Borderline Personality Disorder: treatment and management. <http://www.nice.org.uk/CG78>.
  - US: APA (2006). The Practice Guidelines for the Treatment of Psychiatric Disorders: Compendium. APA press. Copy available.
  - Australia: <http://bit.ly/14MkbWs>
  - Spain: [http://www.gencat.cat/salut/depsan/units/aatrm/pdf/gpc\\_tlp\\_2011\\_completa.pdf](http://www.gencat.cat/salut/depsan/units/aatrm/pdf/gpc_tlp_2011_completa.pdf)
  - Italy: <http://bit.ly/1aGnPls>
  - Netherlands: <http://bit.ly/1iuPbiK>
- [f] Examples of clinics worldwide offering MBT as a treatment:
- The Menninger Clinic in Houston <http://bit.ly/17VUW6V>
  - De Viersprong Clinic, the Netherlands <http://bit.ly/JhlhJk>
  - Robin Kessel Semel Institute, UCLA <http://www.semel.ucla.edu/bpd>
- [g] Fonagy P, Bateman A. Progress in the treatment of borderline personality disorder. Br J Psychiatry. 2006 Jan;188:1-3. <http://dx.doi.org/10.1192/bjp.bp.105.012088>
- [h] The AMASS team have been trained and are using the AMBIT approach. This can be corroborated by the Clinical Director, Islington CAMHS. Contact details provided. Positive results for the service are outlined in the Executive Summary of the AMASS evaluation 2007-2012. Copy available on request.
- [i] The Transformation Team is part of London Borough of Camden. See the following presentation (from the Camden Safeguarding Children Board's website) which references the roll-out of the AMBIT approach: <http://bit.ly/188eS6N>. The Transformation Team training manual can be seen here: <http://ambit-camden.tiddlyspace.com/>
- [j] Positive outcomes can be verified by the CASUS service doctor. Contact details provided. Information on the use of AMBIT by CASUS can be seen here: <http://bit.ly/1qfbbqU>
- [k] Can be corroborated by the CEO, Music and Change UK. Contact details provided. See also their AMBIT page: <http://ambit-mac.tiddlyspace.com/>
- [l] <http://gu.com/p/382ej/tw>