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Research report

The effect of core clinician interpersonal behaviours on depression

K. Barnicot^{a,*}, B. Wampold^{b,c}, S. Priebe^a^a Unit for Social and Community Psychiatry, Queen Mary University of London, UK^b Department of Counselling Psychology, University of Wisconsin, USA.^c Modum Bad Psychiatric Center, Vikersund, Norway

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ABSTRACT

Background: It is well-established that core clinician interpersonal behaviours are important when treating depression, but few studies have evaluated whether outcome is determined by clinicians' general behaviour rather than by the perception of the individual being treated.

Methods: In the NIMH TDCRP, 157 patients rated their clinician's genuineness, positive regard, empathy and unconditional regard during cognitive behavioural therapy, interpersonal therapy or clinical management with placebo. The association between averaged ratings for each of 27 clinicians and their patients' self- and observer-rated depression outcomes was evaluated, adjusting for the deviation of individual patient ratings from the average for their clinician and other potential confounders.

Results: Clinicians in the clinical management condition were rated on average as less genuine and less empathic than those in the psychotherapy conditions. Clinicians' average genuineness, positive regard and empathy were significantly associated with lower depression severity during treatment, but not with recovery from depression, after adjusting for the deviation of the individual patient's rating of their clinician from the average for that clinician, treatment condition and baseline depression severity. Clinician unconditional regard was not significantly associated with outcome.

Limitations: Using averaged ratings of clinician behaviour likely reduced statistical power.

Conclusions: Clinicians' ability to demonstrate genuineness, positive regard and empathy may represent a stable personal characteristic that influences the treatment of depression beyond the individual clinician–patient relationship or an individual patient's perception of their clinician. However, clinicians' ability to demonstrate these behaviours may be poorer when delivering an intervention without a specific rationale or treatment techniques.

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1. Introduction

It is a well-established finding that, regardless of the particular therapeutic model followed or the particular patients they see, some clinicians achieve better outcomes than others (Baldwin and Imel, 2013; Wampold, 2001). It has been estimated that this 'therapist effect' explains between 6% and 9% of the variance in outcomes (Blatt et al., 1996a; Crits-Christoph and Mintz, 1991; Luborsky et al., 1997; Project MATCH Research Group, 1998;) with a meta-analysis of 46 studies placing the average variance explained at 7% (Baldwin and Imel, 2013). In the dataset used in this paper, the National Institute of Mental Health Treatment of Depression Collaborative Research Program (NIHR TDCRP), although one analysis failed to find any evidence of therapist

effects (Elkin et al. 2006), further analysis using improved statistical methodology found that 8% of the variance in depression outcomes was due to therapist effects (Kim et al., 2006). Thus it seems that therapist effects are an important determinant of outcome with potential implications for clinician selection, training, and quality assurance. However, there is a scarcity of high quality evidence on how and why this effect occurs, and on what makes some clinicians more effective than others.

Carl Rogers' theory of the core clinician behaviours necessary for good patient outcomes has been highly influential. He suggested that effective clinicians should be genuine (integrated and genuine within the therapeutic encounter, without front or façade, and expressing his/her true feelings and attitudes), display positive regard (caring for and valuing the client and showing warmth towards them), be empathic (communicating an understanding of what the patient's experiences and emotions feel like to them), and show unconditional regard (the attitude of the clinician towards the client does not fluctuate regardless of what they say or do) (Rogers, 1957; Rogers, 1961;

* Correspondence to: Centre for Mental Health, The Claybrook Centre, 37 Claybrook Road, Hammersmith, W6 8LN, UK.

E-mail address: k.barnicot@imperial.ac.uk (K. Barnicot).

Lietaer, 1987). Over 100 studies of this theory have been conducted to date, and meta-analyses and systematic reviews have concluded that, overall, patients achieve better outcomes if they rate their clinicians as higher on these core behaviours (Bozarth et al., 2002; Elliott et al., 2011; Klein et al., 2001; Orlinsky et al., 1994). However, it is not clear from these studies to what extent the association between patient ratings of clinician behaviour and outcome is driven by the capacities of the clinician to provide the core conditions to various patients, rather than by the characteristics of the individual patient, who might have the characteristics that elicit such behaviour from the clinician (e.g., not interpersonally aggressive, see Boswell et al., 2013), or by the characteristics of the particular patient–clinician dyads involved. It is important to determine this in order to understand better how clinician behaviour affects outcome and therefore how it can potentially be harnessed to improve outcomes. Baldwin et al. (Baldwin et al., 2007) were the first to show that clinician variability in patient-rated alliance is related to outcome, whereas patient variability in alliance ratings is not – suggesting that alliance–outcome associations primarily relate to the clinician's rather than the patient's ability to establish an alliance. There is only one analysis to date that has disaggregated the effect of the core conditions on outcome into the portion of variance explained by the clinician and the portion explained by the patient (Zuroff et al., 2010). They showed that clinicians who were rated on average as higher on a composite measure of genuineness, positive regard and empathy achieved better outcomes, and that this effect was twice the size of the effect of within-clinician differences in individual patients' ratings. This study showed for the first time that the association between patient ratings of clinician behaviour and outcomes is largely driven by the general behaviour of clinicians, regardless of the particular individual patients making the rating.

However, this analysis did not examine the individual effects of genuineness, positive regard, unconditional regard and empathy and thus it is unclear whether all four of these characteristics are important. Furthermore, the analysis focused on outcomes not commonly used in everyday clinical practice (global maladjustment and self-critical perfectionism). The present analysis therefore aimed to determine the individual effects of clinicians' mean genuineness, positive regard, empathy and unconditional regard on a clinically relevant outcome (severity of and recovery from depression).

2. Methods

2.1. Design

A prospective analysis of the effect of clinician genuineness, positive regard, empathy and unconditional regard on depression, using data from the National Institute of Mental Health Treatment of Depression Collaborative Research Program (TDCRP) (Elkin et al., 1985).

2.2. Participants

The present analysis was based on 157 patients allocated to 27 clinicians from the TDCRP study, comprising those who were randomly allocated to receive cognitive behaviour therapy, interpersonal therapy or clinical management with placebo, who completed the Barrett Leonard Relationship Inventory at session two, and whose clinicians had more than one patient.

Clinical management with placebo was included in the analysis because this condition was designed to provide a supportive therapeutic relationship (Elkin et al., 1985). Furthermore, variables related to the relationship have been shown to be comparable between this condition and the psychotherapy conditions whilst some clinicians have been shown to be more effective than others (Blatt et al., 1996b; McKay et al., 2006; Zuroff et al., 2000), and another research has found that providing a therapeutic relationship in conjunction with a placebo can be an effective treatment (Kaptchuk et al., 2014). All participants had a diagnosis of major depression and did not have comorbid bipolar or psychotic disorders. Inclusion and exclusion criteria, sample characteristics, treatment procedures, and assessment procedures have been described previously (Elkin et al., 1985; Elkin et al., 1989). All participants underwent a thorough informed consent procedure.

2.3. Measures

2.3.1. Clinician genuineness, positive regard, empathy and unconditional regard

These were assessed using the patient-rated Barrett Lennard Relationship Inventory (BLRI) (Barrett-Lennard, 1962, 1986). This 64 item questionnaire has a separate sub-scale for each of these four behaviours, including both positively and negatively valenced items, and patients rate their clinicians on each on a scale from –3 (Strongly not true) to ++3 (Strongly true). The possible total scores for each subscale range from –48 to ++48. Patients completed this at their second treatment session and for each clinician an average score was calculated for each sub-scale by averaging across the ratings made by each of their patients.

2.3.2. Outcome measures

2.3.2.1. Patient-rated depression. Patients rated their depression severity on the Beck Depression Inventory (BDI) (Beck et al., 1961) at weeks 0, 4, 8, 12 and 16 of treatment. A score of 9 or less at week 16 was taken to indicate recovery.

2.3.2.2. Observer-rated depression. A trained PhD level researcher assessed patients' depression severity on using the 17 item Hamilton Rating Scale for Depression (HAM-D) (Hamilton, 1967), at weeks 0, 4, 8, 12 and 16 of treatment. A score of 6 or less at week 16 was taken to indicate recovery.

2.4. Statistical analysis

Clinicians' mean genuineness, positive regard, empathy and unconditional regard were treated as continuous variables in order to assess the effect of these behaviours across their full continuum. Logistic regression was used to evaluate the association between these behaviours and recovery from self and observer-rated depression at week 16. Multilevel random effects linear regression was used to evaluate the association between these behaviours and depression severity at weeks 4, 8, 12 and 16 of treatment, with the patient at Level 2 and repeated measures of depression at Level 1, thus accounting for autocorrelation between repeated measures of depression in the same patient. The depression scores did not conform to a normal distribution and so robust standard errors were used. All models adjusted for pre-treatment depression severity at week 0, for treatment condition, and for the difference between an individual patient's rating of their clinician and the average for their clinician. This enabled us to separate out the variance in outcome explained by the general behaviour of that clinician from that explained by the characteristics of the individual patient making the rating.

3. Results

3.1. Between-clinician differences in behaviour

The averaged ratings of each clinician's genuineness ranged from 9.0 to 32.6 (median 22.7, interquartile range 20.6–26.1), whilst their positive regard ranged from 5.3 to 30.0 (median 22.6, interquartile range 16.7–25.3), their empathy ranged from 5.6 to 31.6 (median 21.3, interquartile range 15.8–24.2), and their unconditional regard ranged from 6.3 to 26.4 (median 16.8, interquartile range 13.3 to 18.6). Clinicians in the clinical management condition were rated as less genuine ($\beta = -4.12$, 95% C.I. -6.28 to -1.97 , $p < 0.01$) and less empathic ($\beta = -4.51$, 95% C.I. -6.92 to -2.09 , $p < 0.01$) than those in the psychotherapy conditions, and showed a trend towards lower unconditional regard ratings ($\beta = -1.40$, 95% C.I. -2.19 to 0.12 , $p = 0.07$), but did not differ significantly in their positive regard ($\beta = -1.85$, 95% C.I. -4.08 to 0.38 , $p = 0.10$). Ratings of clinician behaviour did not differ between the cognitive behaviour therapy and interpersonal therapy conditions.

3.2. Intercorrelation between clinician behaviours and association with pre-treatment depression severity

The intercorrelations between clinician genuineness, positive regard, empathy and unconditional regard are shown in Table 1.

Table 1
Intercorrelation between clinician behaviours^a.

	Clinician mean genuineness	Clinician mean positive regard	Clinician mean empathy	Clinician mean unconditional regard
Clinician mean genuineness	1.00 ^a			
Clinician mean positive regard	0.87 ^a	1.00 ^a		
Clinician mean empathy	0.87 ^a	0.85 ^a	1.00	
Clinician mean unconditional regard	0.12	-0.07	0.16 ^a	1.00

* Reported as Pearson r correlation coefficients.

^a $p < 0.05$ (all other correlation coefficients not significant at $p < 0.05$).

Table 2
Association between clinician behaviour and recovery from depression.

	Recovery from depression (BDI score ≤ 9)				Recovery from depression (HAM-D score ≤ 6)			
	Adjusted odds ratio [*]	95% C.I.	p value	S.E.	Adjusted odds ratio [*]	95% C.I.	p value	S.E.
Clinician mean genuineness	1.06	0.99–1.13	0.08	0.03	1.05	0.98–1.11	0.17	0.03
Clinician mean positive regard	1.05	0.99–1.11	0.13	0.03	1.04	0.98–1.11	0.22	0.03
Clinician mean empathy	1.04	0.98–1.10	0.20	0.03	1.02	0.97–1.08	0.46	0.03
Clinician mean unconditional regard	1.02	0.99–1.05	0.17	0.02	1.00	0.91–1.10	0.96	0.05

* adjusted for the patient's baseline depression severity, treatment condition and the deviance of the patient's rating from the average rating for that clinician.

Table 3
Association between clinician behaviour and depression severity during treatment.

	Depression severity (BDI score)				Depression severity (HAM-D score)			
	Adjusted coefficient [*]	95% C.I.	p Value	ΔR^2	Adjusted coefficient [*]	95% C.I.	p Value	ΔR^2
Clinician mean genuineness	-0.32	-0.54 to -0.11	< 0.01	0.02	-0.17	-0.32 to -0.02	< 0.01	0.01
Clinician mean positive regard	-0.29	-0.49 to -0.09	< 0.01	0.02	-0.16	-0.30 to -0.02	0.02	0.01
Clinician mean empathy	-0.21	-0.40 to -0.02	0.03	0.01	-0.11	-0.25 to 0.02	0.09	0.01
Clinician mean unconditional regard	-0.13	-0.46 to 0.19	0.41	< 0.01	0.05	-0.17 to 0.27	0.68	< 0.01

ΔR^2 additional variance explained when clinician mean behaviour is added to the model with baseline depression severity, treatment condition and the deviance of the patient's rating from the average rating for that clinician.

* adjusted for the patient's baseline depression severity, treatment condition and the deviance of the patient's rating from the average rating for that clinician.

The first three of these behaviours were highly intercorrelated; however unconditional regard was poorly correlated with the other subscales. There was no significant difference in the pre-treatment depression severity of participants treated by more versus less genuine, positively regardful, empathic or unconditionally regardful clinicians.

3.3. Clinician behaviour and outcome

The association between clinician behaviour and outcome is shown in Tables 2 and 3.

3.3.1. Clinician genuineness

Clinicians' mean genuineness was significantly associated with lower depression severity during treatment on the BDI and on the HAM-D, and showed a trend towards association with recovery from depression on the BDI, after adjusting for pre-treatment depression severity, treatment condition, and the deviance of each patient's rating of genuineness from the mean for that clinician.

3.3.2. Clinician positive regard

Clinicians' mean positive regard was associated with lower depression severity during treatment on both the BDI and HAM-D, but was not associated with recovery from depression, after

adjusting for pre-treatment depression severity, treatment condition and the deviance of each patient's rating of positive regard from the mean for that clinician.

3.3.3. Clinician empathy

Clinicians' mean empathy was associated with lower depression severity on the BDI during treatment, and showed a trend towards association with lower depression severity on the HAM-D, but was not associated with recovery from depression after adjusting for pre-treatment depression severity, treatment condition and the deviance of each patient's rating of empathy from the mean for that clinician.

3.3.4. Clinician unconditional regard

There was no association between clinicians' mean unconditional regard and recovery from depression or depression severity on either measure.

4. Discussion

The analysis showed that patients allocated to more genuine, empathic and positively regardful clinicians had significantly less severe depression during treatment on both self-rated and observer-rated scales. Clinician genuineness, empathy and positive regard were significantly associated with better outcomes after adjusting for the deviation of the individual patient's rating of their clinicians from the average for that clinician, suggesting that the effect is due to a general propensity of some clinicians to demonstrate these behaviours more than others, regardless of individual differences in patient perceptions of their clinician or the individual patient–clinician relationship. The association was significant after adjusting for pre-treatment depression severity and for treatment condition, suggesting it was not just a consequence of some clinicians having a more difficult caseload than others in terms of pre-treatment depression severity, and neither was it a consequence of differences in clinician behaviour between conditions. However, there was no association between clinician unconditional regard and depression severity. Clinician behaviour was not associated with recovery from depression after adjusting for pre-treatment severity, treatment condition and the deviation of the individual's rating of their clinician from the average, other than a trend for higher odds of recovery in patients allocated to more genuine clinicians.

The findings on the association between clinician behaviours and outcome are in line with recent meta-analyses which found significant aggregate effects of genuineness, empathy and positive regard on symptom improvement (genuineness: $r = -0.24$, 95% C.I. 0.12 to 0.36, $p = 0.03$, Kolden et al., 2011; empathy: $r = 0.31$, 95% C.I. 0.28 to 0.34, $p < 0.01$, Elliott et al. 2011; positive regard: $r = 0.27$, 95% C.I. 0.16 to 0.38, $p < 0.01$, Farber and Doolin, 2011). However, this is the first analysis to separate out the variance due to the clinician themselves from the variance due to individual differences between patients. These results are consistent with Zuroff and colleagues' findings that the clinician contribution to the association between BLRI ratings and outcome is more important than the contribution of individual patient ratings (Zuroff et al., 2010). The findings suggest that a clinician's general ability to behave genuinely and empathically and to show positive regard is linked to better outcomes in the treatment of depression, regardless of the particular patient treated. Thus, between-clinician variation in the ability to show genuineness, empathy and positive regard may plausibly offer a partial explanation for clinician effects in psychotherapy. However, the additional variance in outcomes explained by clinician average behaviour was small, suggesting

their ability to demonstrate these behaviours can explain only part of the clinician effect.

Clinician unconditional regard seems quite distinct in that it was not associated with outcome, and was only weakly correlated with the other subscales. This may suggest it is not a key aspect of core clinician behaviour. Indeed, Rogers did not consider unconditional regard as a distinct construct but rather as part of the construct of positive regard (Rogers, 1961), although the lack of correlation between positive regard and unconditional regard subscales in the present analysis would seem contradictory to this viewpoint.

Clinician behaviour was rated more poorly on average under the clinical management condition than under the psychotherapy conditions. The lack of significant relationship between clinician behaviour and recovery after adjusting for treatment condition may possibly suggest a confounding influence of treatment condition, whereby lower ratings of clinician behaviour co-occurred with a trend towards lower recovery rates under the clinical management condition (Elkin et al. 1989). By contrast, depression severity during treatment did not differ between conditions (Elkin et al. 1989), and the influence of clinician behaviour on depression severity outcomes seems to be independent of treatment condition. The lower ratings of clinician behaviour under the clinical management condition may reflect the idea that having a specific treatment rationale, treatment technique and treatment goals to work towards can help patients and clinicians build a collaborative working relationship. This is in line with the model of effective psychotherapy developed by Wampold and Budge (2012), in which they argue that patients' initial trust in the working relationship with their clinicians is hugely bolstered if clinicians provide a credible theory to explain the source of patients' problems and then prescribe the use of specific techniques to resolve them. By engaging in this therapeutic ritual, an expectation is created in the patient that the therapy will help them. This facilitates the development of a collaborative working relationship between clinician and patient, which in turn facilitates a more positive perception of the clinician by the patient, in which the clinician is perceived as genuine, empathic and positively regardful. Furthermore, from the clinician perspective, believing in and using a specific rationale may aid their ability to behave genuinely (because they believe in what they are doing). The resultant collaborative working relationship based around the prescribed techniques may engender increased empathy and positive regard in the clinician towards their patient. Although clinicians in the clinical management condition were told to behave genuinely and empathically, without a specific treatment rationale or techniques, they may have found it more difficult to feel, behave and be perceived as genuine and empathic.

4.1. Strengths and limitations

Strengths of the analysis included the use of a sample of clinicians which were selected to be roughly equivalent in years of experience and allegiance to their chosen therapeutic model. Furthermore, the analysis built on Zuroff and colleagues' use of advanced statistical methods to partial out the variance explained by the clinician from that explained by individual differences in ratings. However, given that the sample consisted of only 27 clinicians, and that variance was inevitably lost by using averaged ratings of behaviour, the analysis may have lacked adequate power to establish the size and significance of the effect of clinician behaviour on recovery. Finally, it has been argued that, because clinician genuineness, positive regard and empathy as measured on the BLRI load highly onto a single factor, their influence on outcome should not be studied separately (Blatt et al., 1996a).

Supporting this, we found that that they were highly intercorrelated and they were all associated with outcome.

4.2. Implications for clinical practice and further research

The findings stress the importance of clinician genuineness, empathy and positive regard for clinical practice. What does this mean in practice? Most clinicians have a good understanding of what being empathic and demonstrating positive regard means – but genuineness has been argued to be the most controversial of Roger's core conditions for modern clinicians, due to the “relinquishing of professional power” that it implies (Thorne and Sanders, 2013 p.46). It has been argued that genuineness provides a core foundation for clinician's ability to be empathic and positively regardful – showing empathy and positive regard is meaningless unless it is a genuine reflection of the clinician's self (Greenberg and Geller, 2001; Lietaer, 2001). A recent UK Department of Health publication outlines showing “appropriate levels of genuineness”, “being able to show honesty through self-reflection”, being “open”, and avoiding “insincerity” as core clinician competencies across the delivery of all psychological treatments (Roth and Pilling, 2007). Genuine clinicians “do not pretend to be interested when they are not, do not fake attention or understanding, do not say what they do not mean and do not adopt behaviours designed to win approval” (Corey, 2008, p.250). Greenberg and Geller suggest that genuineness requires the clinician to let go of preconceptions and emotional baggage, giving their full attention to the interaction with the client, whilst also being aware of their own internal experiences and feelings and communicating these to the client (Greenberg and Geller, 2001). Communication of the clinician's internal experiences must be carried out non-judgementally and in a disciplined and sensitive manner. In particular, disclosure of the clinician's feelings about the patient and the session should be used only when the clinician senses the client is receptive to it, should be used constructively not destructively, and should be comprehensive i.e. expressing not only what is being felt but also the meta-experience: what is felt about what is being felt (Greenberg and Geller, 2001; Carkhuff and Berenson, 1967). Of course, it is the patients' perception of genuineness that we have shown to predict outcome. Yet client centred and experiential clinicians repeatedly emphasise that genuineness does not simply consist of a set of behaviours and cannot be faked – instead, it must be a genuine attitude of the clinician (Greenberg and Geller, 2001; Patterson, 1985; Rowan, 1998). Writers on the topic emphasise the need for personal development of the clinician in order to be able to achieve genuineness with clients, including development of high levels of self-awareness, self-acceptance and self-trust (Lietaer, 2001; Mearns, 1997; Natiello, 1987). In addition to competent training and supervision, Lietaer recommends participation of the clinician in group therapy as facilitative for developing these capacities (Lietaer, 2001).

In the NIMH TDCRP, differences in outcome between the treatment conditions were minimal, with no differences in outcome between the two psychotherapy conditions, and only a trend towards lower odds of recovery from depression under the clinical management condition versus the interpersonal therapy condition (Elkin et al., 1989). This is in line with a number of meta-analyses showing minimal differences in outcome between different psychotherapy models (Wampold, 1997). By contrast, the effect of clinician behaviour we have found is small – but is significantly associated with differences in outcome. Yet the focus of clinical training programmes is currently very much on specific therapy models, and research resources are overwhelmingly directed towards evaluating the relative efficacy of various specific treatment models (Thorne and Sanders, 2013). Presently, it is not known to what extent genuineness, empathy and positive regard

can be trained or whether they rely mainly on clinician's innate ability and attitudes (Thorne and Sanders, 2013; Greenberg and Geller, 2001; Baldwin, 1987). Further research should evaluate this question. If these positive clinician behaviours rely largely on innate ability, reliable methods for evaluating these characteristics in prospective trainee clinicians should be developed, tested, and applied to screen out unsuitable candidates. Prospective clinicians' ability to demonstrate these characteristics should be as important a determinant of entry to therapy training programmes as their academic ability or clinical experience. If these positive clinician behaviours can be trained, evidence-based training programmes should be developed and their efficacy tested. Nonetheless, specific techniques should still be considered crucial, at least in part because they help to foster a collaborative working relationship (Wampold and Budge, 2012), as suggested by the less positive ratings of the therapists under the clinical management condition. Evidence-based training and supervision of clinicians should place equal weight on specific therapy techniques and on generic core clinician behaviours, and should foster an understanding of how the two interact.

Finally, although core clinician behaviours have been shown to be a plausible factor in explaining the clinician effect in psychotherapy, they are not able to explain all the variance attributable to clinician effects. Other research indicates that the most effective clinicians in the NIMH TDCRP were more psychologically minded, eschewed biological interventions, and expected treatment to be lengthy (Blatt et al., 1996a). Further research should explore these and other characteristics of effective clinicians to obtain a more comprehensive understanding of why some clinicians are more effective than others.

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Conflict of interest

All authors declare that they have no conflict of interest.

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