

## A review for Psychological Therapy Clinicians

A critical review of NLP as an effective treatment choice of psychotherapeutic change in individuals with depression or anxiety.

Lisa Wake

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## Executive Summary

### **Background**

There is an increasing burden on the NHS and the Department of Work and Pensions from those individuals who are unable to work because of mental illness. Layard et al (2006) identified that over 50% of individuals who are in receipt of incapacity benefit have mental illness as a primary or secondary cause. There are also increasing pressures on the NHS to provide effective treatments that are evidence based. Currently Cognitive Behavioural Therapy is the preferred treatment of choice identified by the National Institute for Clinical Excellence, because of its brevity and demonstrable effectiveness through randomised controlled trials. Most other approaches to psychotherapy involve long term care, which has an increased level of cost to the NHS. This paper reports on the evidence base for a similar form of psychological therapy to Cognitive Behavioural Therapy, neurolinguistic psychotherapy and makes recommendations for research into the effectiveness of this approach.

### **Question**

The question posed in this critical review is whether neurolinguistic psychotherapy or NLP is an effective treatment choice of psychotherapeutic change in individuals with depression or anxiety.

## **Findings**

There is limited evidence of the effectiveness of NLP as a methodology in psychological intervention and only two studies that demonstrate it's effectiveness as a psychotherapy. A meta-analysis has been conducted that demonstrates the flawed nature of most of the research in this area, and the researchers then utilise these findings to conduct an empirically sound study that does demonstrate it's effectiveness in individuals who have a diagnosis of phobia. Further research was then conducted with a group of 55 patients with a DSM diagnosis of mental disorder, and this demonstrated a marked improvement in symptoms in 76% of the group compared to a control group, using empirically sound assessment tools. The research had some flaws when using research evaluation criteria; however it does provide a starting point for further research.

## **Recommendations**

The report concludes with recommendations for a specific research project to assess the effectiveness of neurolinguistic psychotherapy in an NHS setting which includes an evaluation of the economic benefit of the approach.

## 1. Introduction

### 1.1 Introduction

This report critically reviews a brief outcome oriented model of psychotherapy, neurolinguistic psychotherapy, as an effective psychotherapy in individuals with depression or anxiety. The report makes recommendations on further research that is required in this area of psychotherapy with regard to measuring outcomes and patient benefit. The report concludes with an action plan of how change can be implemented into clinical practice.

### 1.2 Background

The Depression Report (Layard et al 2006) identified up to 50% of all people in receipt of incapacity benefit is due to mental illness as either a primary or secondary factor. There are over a million people in receipt of benefit and not working, yet the Depression Report identifies that the cost of treatment for those suffering anxiety or depression is £750 per person. Layard continues to note that there are insufficient numbers of therapists, proposing a total of ‘ten thousand more therapists’ be trained and employed to resolve this problem (p. 3). The report highlights that 5,000 psychological therapists would need to be trained from amongst the clinicians already working within Mental Health in the NHS, yet Layard does not consider the existing 6,000 psychotherapists already trained,

experienced and accredited through the voluntary regulatory body for psychotherapy, the UK Council for Psychotherapy.

The Depression Report has now been adopted by the Department of Health, Care Services Improvement Partnership (CSIP), and a business case has been submitted to the Treasury for the national roll-out of local Psychological Therapy Services (Pilling and Burbeck 2006).

### 1.3 Evidence Based Practice

The Nice guidelines (2004) identified that Cognitive Behavioural Therapy (CBT) is the preferred treatment of choice as this is the only modality of psychological therapy that has an evidence base for effectiveness using randomised control trials (Dobson 1989, Hollon et al 2002, Hollon & Beck 2004, Westbrook & Kirk 2005). Yet research conducted by Stiles et al (2006) demonstrates that theoretically different psychotherapy approaches tend to have equivalent outcomes. Hamer & Collinson (1999) suggest that there are a number of factors that influence the drive towards evidence based practice within the health service, not least those of cost pressures. CBT is a brief model of psychotherapy that typically lasts between 6 and 20 sessions, therefore fulfilling the Department of Health's aim of providing brief psychotherapeutic interventions at limited cost. Within the wider field of psychotherapy, most other approaches require a prolonged time in therapy, often between 1 and 5 years, yet there are other psychotherapy approaches that are closely related to CBT, such as neurolinguistic psychotherapy, which,

if proved effective, would fulfil a realistic economic aim of an effective psychotherapy that is brief and time limited.

Sackett et al (2000) states that evidence based practice consists of 5 stages:

- Step 1 – Formulating an answerable question
- Step 2 – Finding the evidence
- Step 3 – Evaluating the Evidence
- Step 4 – Implementing the Evidence
- Step 5 – Evaluating the Effectiveness of Change

McLeod (2001) highlights the difficulty that psychotherapy faces in that it is based within the field of social science, and the specific approach taken within psychotherapy means that new phenomena often arise in practice rather than through empirical research. This has implications for the field of psychotherapy in general, particularly that of verification. McLeod proposes that there are three reasons why verification in psychotherapy is important:

- Verificationist research is an effective strategy for building legitimacy
- The academic disciplines of psychology and psychiatry, that have hosted the bulk of therapy research have been dominated by hypothesis testing, experimental research design

- The majority of therapists have received training that does not encourage or prepare the therapist to become involved in research.

## 2. Formulation of Question

In considering the agenda of IAPT, it is essential that any evidence for equivalent brief psychotherapy interventions to that offered by CBT has an effective evidence base. Neurolinguistic psychotherapy is a relatively new model of therapy, compared to CBT, Psychodynamic and Family Therapy approaches. It is essential therefore that the wider body of literature of neurolinguistic programming (NLP) as well as the therapeutic applications is considered. The initial question to be considered is:

What existing evidence is there of the effectiveness of neurolinguistic psychotherapy as a method of intervention in clinical conditions?

In using the model proposed by Fleming (1998) and Sackett et al, (1996), the question is divided into 4 components:

- Population
- Intervention
- Comparison
- Outcomes

Population – the population to be considered is that identified within the Depression Report (Layard 2006), those individuals who have a clinical diagnosis of anxiety or depression.

Intervention – the intervention to be critically evaluated is neurolinguistic psychotherapy. In recognition of the relative short history of neurolinguistic psychotherapy, which has only been established as a modality since 1992, the wider body of research that exists within the field of NLP will also be evaluated.

Comparison – it is anticipated that there are no comparative studies of neurolinguistic psychotherapy compared to other therapeutic approaches; therefore this will not be considered as part of this report.

Outcomes – the report will consider the effectiveness of neurolinguistic psychotherapy as an effective modality using the CASP (Critical Skills Appraisal Programme 2006) as the measurement tool.

### **Question**

**Is NLP an effective treatment choice of psychotherapeutic change in individuals with depression or anxiety?**

### 3. Finding the Evidence

A search strategy (Palmer & Brice, 1999, in Hamer & Collinson, 1999) was developed that included the search of recognised academic research databases Psycinfo, Medline, CINAHL, Embase, Ovid, as well as the National Electronic Library, the NHS Research web database for the Cochrane Study of Systematic Reviews. Three NLP research specific database reviews were also undertaken and a systematic review of the NLP psychotherapy literature – see appendix 1. A total of 21 research articles were identified as being potentially of interest to this report, of which 12 were considered to be sufficiently robust in their research design, methodology and evaluation to be of use to this study. Each of these will be reviewed using the CASP method. A summary of this process is evidenced in appendix 2.

### 4. Evaluation of Evidence / Findings

As the above section has demonstrated, there is little evidence for the effectiveness of neurolinguistic psychotherapy as a treatment of choice for the disorders of anxiety and depression. Of the 12 papers that do demonstrate a credible source of research, 8 of the papers provide evidence of effectiveness of intervention with context specific anxiety or phobia disorders. Koziy et al (1992) considers the effectiveness of neurolinguistic psychotherapy with individuals who are experiencing anxiety following being raped. Ferguson (1987), Krugman et al (1985) and Hale (1986) review the application of NLP in anxiety related to public speaking. The resolution of phobias, which is a context specific

form of anxiety disorder, is reviewed by Einspruch and Forman (1985), Kammer et al (1997) and Liberman (1984). Allen (1982) reviews the effectiveness of NLP with individuals who have a phobia of snakes. Each of these studies is discounted using the CASP methodology as they are not directly relevant to the question asked.

Einspruch and Forman (1985) reviewed 39 studies on NLP as a generic psychological intervention that had taken place between 1975 and 1984. Their study identified a number of components that questioned the validity of the research that had been undertaken previously.

- There was a lack of understanding of concepts of pattern recognition and none or limited consideration of the context for the study. (Gumm et al 1982, Beale 1981, Birholtz 1981, Cole-Hitchcock 1980, Fromme and Daniell 1984, Hernandez 1981, Johannsen 1982, Kraft 1982, Lange 1981, Mattar 1981, Owens 1978, Radosta 1982, Shaw 1978, Talone 1983, and Thomason et al 1980.)
- Most researchers had used NLP as a methodology rather than an approach to therapy (Hammer 1983, Yapko 1981a,b)
- Where the linguistic components of NLP had been used, the users were unfamiliar with these elements. (Ellickson 1983, Frieden 1981 and Pantin 1982.)

- There was a failure to consider the role of existing associations through the use of stimulus response or operant conditioning (Dorn 1983a)
- There was inadequate interviewer training (Dowd and Hingst 1983, Brockman 1981, Cody 1983, Ellickson 1983, Dorn 1983b, Dowd and Pety 1982, Ehrmantraut 1983, Falzett 1981, Green 1981, Hammer 1983, and Paxton 1981.
- There were logical mistakes made (Mercier and Johnson 1984, Ellis 1981 and Frye 1980.)

Einspruch and Forman identified that although NLP is testable and verifiable, that any previous research was methodological inadequate. They concluded that it was not possible to determine the validity of either NLP concepts or whether NLP-based therapeutic procedures are effective for achieving therapeutic outcomes. They made recommendations that empirical investigations were conducted to test the validity of NLP as a model of psychotherapy.

Two pieces of research emerged from this original review by Einspruch and Forman, one by the researchers themselves, who in 1988 were able to demonstrate marked improvement in a group of 31 phobic patients within a multifaceted treatment programme using NLP and Ericksonian approaches. Measurement instruments used were 'Mark's phobia questionnaire' and 'fear inventory', and the 'beck depression inventory' pre and post treatment. The researchers concluded that NLP holds promise for becoming an

important set of therapeutic techniques for treating phobias. In using the CASP (2006) evaluation methodology, this piece of research meets the initial screening criteria, and also meets the criterion of credibility, dependability and confirmability. The research does not however address the issue of transferability, nor does it address one of the fundamental rationales for evidence based practice, that of economic benefit.

A further piece of research was conducted by Genser-Medlitsch and Schütz (1997). This study demonstrated through a comprehensive evaluation of 55 patients that neurolinguistic psychotherapy is an effective modality of therapy in accordance with its therapeutic objective. The clients all had severe DSM conditions, such as schizo-affective disorder, psychosis, psychosomatic tendencies, depression or dependency problems, most of who were also on medication. Patients in the control group all had milder symptoms. Measurements were conducted at three points in time of changes in individual complaints, clinical psychological symptoms, individual coping strategies, and locus of control tendencies, using the linear rating scale model (LRSM) and the linear partial credit model (LPCM). After therapy, the clients who had received NLP scored significantly higher (76%) in each of the measured areas and experienced a reduction in clinical symptoms. The researchers concluded that 'It could be established that, in principle, NLP is effective in accordance with the therapeutic objective'. As the only robust piece of research that specifically uses neurolinguistic psychotherapy, there are a number of flaws within the study when assessed against the CASP (2006) criterion. The study lacks confirmability by not providing a definitive description of the therapeutic process. Norcross (2002) suggests that most therapeutic are often the result of common

factors in the therapeutic relationship, such as the therapeutic alliance, empathy of the therapist and a collaborative relationship. The study lacks credibility as it is impossible to determine if there are contributing factors to the validity of this study such as the history of the patients or whether the patients had been in receipt of therapy before. The study is transferable, and it would benefit ongoing research to include a longitudinal follow up study of this group of patients in demonstrating effects of therapy over time and whether there is any recurrence of symptoms. This study also does not address the economic benefit.

#### 4.1 Summary of the findings

It is clear from the limited evidence that exists, that it is not possible to generalise on the four studies (Einspruch & Forman 1988, Genser-Medlitsch & Schütz 1997, Hossack 1993, and Konnefal et al 1992) that been conducted. Hossack (1993) used a descriptive case study to evidence the effectiveness of guided imagery in managing depression in one case. The study by Konnefal et al (1992) lacked clear selection criteria of the study subjects and did not focus specifically on those with a clinical diagnosis of anxiety. Einspruch and Forman (1988) have been able to demonstrate the effectiveness of NLP for phobia disorders that result in anxiety states using recognised psychological assessment tools. Genser-Medlitsch and Schütz (1997) were also able to demonstrate clinical effectiveness, yet the study lacks credibility as the study subjects were not selected

clearly enough, nor were the possible variables considered. None of the studies considered an economic evaluation or the longer term effects of the interventions.

In conclusion it is not possible for these studies to contribute fully to existing psychotherapy practice; however it is possible to make recommendations for future research into this area including the development of empirical research of the methodology.

## 5. Recommendations

It is recommended that research is conducted to assess the effectiveness of neurolinguistic psychotherapy as a psychological intervention. The research should include:

- Clear criteria for inclusion in the study
- Clear definition of the process of neurolinguistic psychotherapy
- Utilisation of the Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM) (Barkham et al 1998, 2005) at the beginning and end of treatment
- Economic evaluation of the cost of treatment, the numbers of clients returning to work, and the reduction in payment in incapacity benefit. (Barkham et al 2001)

## 6. Implementation of change.

Garland and Corfield (1999) propose that research is appropriate when best practice is not defined, as presented in the findings of this report.

Rogers (1962) proposes that change can occur best through diffusion of innovations, and in considering the place of neurolinguistic psychotherapy in the NHS, it is apparent through the literature that the change process with regard to the use of NLP within the medical model is at stage 2, that of interest.

<b>Rogers Stages</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Process of Innovation</b>	Awareness	Interest	Evaluation	Trial	Adoption
<b>Medical Model</b>	Henwood & Lister (2007)	GPs, Nurses, Psychotherapists and Counsellors are now receiving training in NLP (Wake 2006, Mental Health Foundation 2006)			

The next steps are to develop evaluation processes for the methodology in a clinical setting. It is proposed that the process outlined in appendix 3 is followed.

## 7. Conclusion

The purpose of this report was to critically review the use of neurolinguistic psychotherapy as an effective treatment choice of psychotherapeutic change in individuals with depression or anxiety. In reviewing the literature, there is limited evidence base for the approach in psychotherapy. Four research studies exist that do support its use and effectiveness, however each of these are flawed in research methodology. It is proposed that a research project is undertaken with local NHS providers to determine if neurolinguistic psychotherapy is an effective methodology of psychological intervention for patients who are unable to work because of anxiety or depressive illness.

## References

Allen, K. L., (1982) *An investigation of the effectiveness of Neurolinguistic Programming procedures in treating snake phobics*. Dissertation Abstracts International 43(3), 861-B  
University of Missouri at Kansas City.

Barkham, M., Evans C., Margison, F., McGrath, G., Mellor-Clark, J., Milne, D., & Connell, J., (1998) *The rationale for developing and implementing core outcome batteries for routine use in service settings and psychotherapy outcome research*. Journal of Mental Health, 7, 35-47

Barkham, M., Margison, F., Leach, C., Locock, M., Mellor-Clark, J., Evans, C., Benson, L., Connell, J., Audin, K., & McGrath, G. (2001) *Service profiling and outcomes benchmarking using the CORE-OM: towards practice-based evidence in the psychological therapies*. Journal of Consulting and Clinical Psychology. 69, 184-196

Barkham, M., Gilbert, N., Connell, J., Marshall, C., & Twigg, E., (2005) *Suitability and utility of the CORE-OM and CORE-A for assessing severity of presenting problems in psychological therapy services based in primary and secondary care settings*. British Journal of Psychiatry. 186. 239-246

Beale, R. P. (1981). *The testing of a model for the representation of consciousness* (Doctoral dissertation, Fielding Institute, 1980). Dissertation Abstracts International, 41, 3565B, 3566B. (University Microfilms No. 81-067, 99)

Bell, S., Clark, D., Knapp, M., Layard, R., Meacher, Priebe, S., Thornicroft, G., Turnberg, Wright, B.. (2006) *The Depression Report: A New Deal for Depression and Anxiety Disorders*. London School of Economics: The Centre for Economic Performance's Mental Health Policy Group.

Birholtz, L. S. (1981). *Neuro-Linguistic Programming: Testing some basic assumptions* (Doctoral dissertation, Fielding Institute, 1981). Dissertation Abstracts International, 42, 2042B. (University Microfilms No. 81-183, 24)

Brockman, W. (1981). *Empathy revisited: The effect of representational system matching on certain counseling process and outcome variables* Doctoral dissertation, College of William and Mary. Dissertation Abstracts International, 41, 3421A(University Microfilms No. 81-035, 91)

Cody, S. G. (1983). *The stability and impact of the primary representational system in Neurolinguistic Programming: A critical examination* Doctoral dissertation, University of Connecticut, 1983). Dissertation Abstracts International, 44, 1232B(University Microfilms No. 83-191, 87)

Cole-Hitchcock, S. (1980). *A determination of the extent to which a predominant representational system can be identified through written and verbal communication and eye scanning patterns* (Doctoral dissertation, Baylor University. Dissertation Abstracts International, 41, 1907B-1908B. (University Microfilms No. 80-252, 27)

Critical Skills Appraisal Programme (2006). Public Health Resource Unit. England.

Dobson, K., (1989) *A meta-analysis of the efficacy of cognitive therapy for depression.*  
Journal of Consulting and Clinical Psychology, 57, 414-420

Dorn, F. (1983a). *Assessing primary representational system (PRS) preference for Neuro-Linguistic Programming (NLP) using three methods.* Counselor Education and Supervision, 23, 149-156.

Dorn, F. J. (1983b). *The effects of counselor-client predicate use in counsellor attractiveness.* American Mental Health Counselor's Association Journal, 5,22-30.

Dowd, E., & Hingst, A. (1983). *Matching therapists' predicates: An in vivo test of effectiveness.* Perceptual and Motor Skills, 57, 207-210.

Dowd, E., & Pety, J. (1982). *Effect of counselor predicate matching on perceived social influence and client satisfaction.* Journal of Counseling Psychology, 29, 206-209.

Einspruch, E.L., & Forman, B.D., (1985) *Observations Concerning Research Literature on Neuro-Linguistic Programming,* in Journal of Counselling Psychology, 32:4, 589-596.

Einspruch, E.L., & Forman, B.D. (1988) *Neurolinguistic Programming in the Treatment of Phobias*. *Psychotherapy in Private Practice*, 6:1, 91-100

Ellickson, J. (1983). *Representational systems and eye movements in an interview*. *Journal of Counseling Psychology*, 30, 339-345.

Ehrmantraut, J. E. (1983). *A comparison of the therapeutic relationship of counseling students trained in neurolinguistic programming vs. students trained in the Carkuff model* Doctoral dissertation, University of Northern Colorado. *Dissertation Abstracts International*, 44, 3191B. (University Microfilms No. 83-284, 91)

Ellis, J. (1981). *Representation systems: An investigation of sensory predicate use in a self-disclosure interview* Doctoral dissertation, University of Minnesota. *Dissertation Abstracts International*, 41, 4244B-4255B. (University Microfilms No. 81-094, 21)

Falzett, W. (1981). *Matched versus unmatched primary representational systems and their relationship to perceived trustworthiness in a counseling analog*. *Journal of Counseling Psychology*, 28, 305-308.

Ferguson, D. M., (1987) *The effect of two audiotaped Neurolinguistic Programming (NLP) phobia treatments on public speaking anxiety*. *Dissertation Abstracts International* 49(4), 765 University of Tennessee.

Field, E.S., (1990) *Neurolinguistic programming as an adjunct to other psychotherapeutic/hypnotherapeutic interventions*. The American journal of clinical hypnosis v.32; no.3; pp.174-182

Fleming, K. (1998). *Asking answerable questions*. Evidence Based Nursing, 1(2), 36-37

Frieden, F. (1981). *Speaking the client's language: The effects of Neuro-Linguistic Programming (predicate matching) on verbal and nonverbal behaviors in psychotherapy* Doctoral dissertation, Virginia Commonwealth University. Dissertation Abstracts International, 42, 1171B. (University Microfilms No. 81-189, 60)

Fromme, D. K., & Daniell, J. (1984). *Neurolinguistic programming examined: Imagery, sensory mode, and communication*. Journal of Counseling Psychology, 31, 387-390.

Frye, M. (1980). *An analysis of the relationship between leisure interests and representational systems among college freshman students with implications for leisure counseling* Doctoral dissertation, Oklahoma State University. Dissertation Abstracts International, 41, 2764A. (University Microfilms No. 80-271, 78)

Garland, G., Corfield, F., (1999) Audit. In Hamer. S., & Collinson, G., (eds) *Achieving Evidence-Based Practice: A handbook for practitioners*. London: Bailliere Tindall

Genser-Medlitsch, M., Schütz, P., (1997) *Does Neuro-Linguistic psychotherapy have effect? New Results shown in the extramural section.* ÖTZ-NLP, Wiederhofergasse 4, A-1090, Wien, Austria.

Green, M. (1981). *Trust as affected by representational system predicates* Doctoral dissertation, Ball State University. Dissertation Abstracts International, 41, 3159B-3160B. (University Microfilms No. 81-046, 51

Gumm, W., Walker, M., & Day, H. (1982). *Neurolinguistic programming: Method or myth?* Journal of Counselling Psychology, 29, 327-330.

Hale, R. L., (1986) *The effects of Neurolinguistic Programming (NLP) on public speaking anxiety and incompetence.* Dissertation Abstracts International 47(5)

Hammer, A. (1983). *Matching perceptual predicates: Effect on perceived empathy in a counseling analog.* Journal of Counseling Psychology, 30, 172-179.

Henwood, S., Lister, J., (2007) *NLP and Coaching for Healthcare Professionals: developing Expert Practice.* London:Wiley Publications.

Hernandez, V. (1981). *A study of eye movement patterns in the Neuro-Linguistic Programming model* Doctoral dissertation, Ball State University. Dissertation Abstracts International, 42, 1587B. (University Microfilms No. 81-105, 05)

Hollon, S.D., Beck, A.T., (2004) *Cognitive and Cognitive Behavioural Therapies*. In Bergin and Garfield's Handbook of Psychotherapy and Behaviour Change (5<sup>th</sup> Edn) (Ed. M. J. Lambert), pp. 447-492, New York, Wiley

Hossack, A. Standidge, K., (1993) *Using an imaginary scrapbook for neurolinguistic programming in the aftermath of a clinical depression: a case history*. Gerontologist. 33(2):265-8.

Humphris, D. (1999). Types of Evidence. In Hamer. S., & Collinson, G., (eds). *Achieving Evidence-Based Practice: A handbook for practitioners*. London: Bailliere Tindall

Johannsen, C. (1982). *Predicates, mental imagery in discrete sense modes, and levels of stress: The Neuro-Linguistic Programming typologies* Doctoral dissertation, United States International University. Dissertation Abstracts International, 43, 2709B. (University Microfilms No. 82-296, 38)

Kammer, D., Lanver, C., Schwochow, M., (1997) *Controlled treatment of simple phobias with NLP: evaluation of a pilot project*. University of Bielefeld, Department of Psychology, unpublished paper.

Konefal, J., Duncan, R. C., Reese, M., (1992) *Neurolinguistic programming training, trait anxiety, and locus of control*. Psychological Reports; Jun Vol 70(3, Pt 1) 819-832.

Koziey, P. W.; McLeod, G., (1987) *Visual-Kinesthetic Dissociation in Treatment of Victims of Rape (Research and Practice)* Professional Psychology: Research and Practice. American Psychological Association.

Kraft, W. (1982). *The effects of primary representational system congruence on relaxation in a Neuro-Linguistic Programming model* Doctoral dissertation, Texas A & M University. Dissertation Abstracts International, 43, 2372B. (University Microfilms No. 82-261, 01)

Krugman, M., Kirsch, I., Wickless, C., Milling, L., Golicz, H., Toth, A., (1985) *Neuro-Linguistic Programming Treatment for Anxiety: Magic or Myth?*. Journal of Consulting & Clinical Psychology. 53(4):526-530

Lange, D. (1981). *A validity study of the construct "most highly valued*

*representational system" in human auditory and visual perceptions* Doctoral dissertation, Louisiana State University and Agricultural and Mechanical College. Dissertation Abstracts International, 41, 4266B. (University Microfilms No. 81-104, 20)

Liberman, M. B., (1984) *The treatment of simple phobias with Neurolinguistic Programming techniques*. Dissertation Abstracts International 45(6), St. Louis University.

Mattar, A. (1981). *Primary representational systems as a basis for improved comprehension and communication* Doctoral dissertation, Utah State University. Dissertation Abstracts International, 41, 3162B. (University Microfilms No. 81-041, 13)

McLeod, J. (2001) *Qualitative Research in Counselling and Psychotherapy*. London: Sage.

Mental Health Foundation (2006) Research Grant. *Training and Research for Service Users and Staff in Neuro-Linguistic Programme (N.L.P.)* The Vale Day Centre, Leeds

Mercier, M., & Johnson, M. (1984). *Representational system predicate use and convergence in counseling: Gloria revisited*. Journal of Counseling Psychology, 31, 161-169.

Norcross, J.C., (2002) *Psychotherapy Relationships that Work: Therapist Contributions and Responsiveness to Patient Needs*. New York: Oxford University Press.

Owens, L. (1978). *An investigation of eye movements and representational systems* Doctoral dissertation, Ball State University. Dissertation Abstracts International, 38, 4992B. (University Microfilms No. 78-038, 28)

Pantin, H. (1982). *The relationship between subjects' predominant sensory predicate use, their preferred representational system and self-reported attitudes towards similar versus different therapist-patient dyads* Doctoral dissertation, University of Miami. Dissertation Abstracts International, 43, 2350B. (University Microfilms No. 82-292, 08)

Paxton, L. (1981). *Representational systems and client perception of the counseling relationship* Doctoral dissertation, Indiana University. Dissertation Abstracts International, 41, 3888A. (University Microfilms No. 81-059, 41)

Pilling, S., Burbeck, R. (2006) *Improving Access to Psychological Therapies (IAPT) Programme. An Outline Business Case for the national roll-out of local Psychological Therapy Services*. London: National Collaborating Centre for Mental Health, University College London.

Radosta, R. (1982). *An investigation of eye accessing cues* Doctoral dissertation, East Texas State University. Dissertation Abstracts International, 43, 883B. (University Microfilms No. 82-194, 81)

Rogers, E. M., (1962) *Diffusion of Innovations*. New York. The Free Press

Rogers, S., (1993): *Neurolinguistic programming treatment of combat-related posttraumatic stress disorder*. Dissertation Abstract International. Vol 54(3-B).

Rosa, N. M., (1988) *Anchoring as a treatment for simple phobias*. Phobia Practice & Research Journal Vol 1(2)

Sackett, D.L., Rosenberg, W.M., Gray, J.A.M., Haynes, B.R. & Richardson, W.S. (1996). *Evidence based medicine: what it is and what it isn't*. BMJ, 312, 71-72

Sackett DL, Straus SE, Richardson WS, Rosenberg W, Haynes, RB (2000) *Evidence based medicine: How to practice and teach evidence based medicine* Edinburgh: Churchill Livingstone.

Selley, A., (2001). *Neuro linguistic programming (NLP)*. Dental Health. May; 40(3): 10.

Shaw, D. (1978). *Recall as effected by the interaction of presentation*

*representational system and primary representational system* Doctoral dissertation, Ball State University. Dissertation Abstracts International, 38, 5931A.(University Microfilms No. 78-038, 30)

Stanton, H. E., (1988) *Treating phobias rapidly with Bandler's theatre technique*. Australian Journal of Clinical & Experimental Hypnosis Vol 16(2), 153-160

Stanton, H. E., (1996) *Combining hypnosis and NLP in the treatment of telephone phobia*. Australian Journal of Clinical & Experimental Hypnosis Vol 24(1), 53-58

Stiles, W.B., Barkham, M., Twigg, E., Mellor-Clark, J., Cooper, M., (2006) *Effectiveness of Cognitive-Behavioural, Person-Centred and Psychodynamic Therapies as Practised in UK National Health Service Settings*. Psychological Medicine, 36, 555-566.

Talone, J. M. (1983). *The use of sensory predicates to predict responses to sensory suggestions* Doctoral dissertation, Utah State University. Dissertation Abstracts International, 44, 618B-619B. (University Microfilms No. 83-135, 68)

Thomason, T. C., Arbuckle, T., & Cady, D. (1980). *Test of the eye movement hypothesis of Neurolinguistic Programming*. Perceptual and Motor Skills, 51, 230.

Wake, L., (2006) *Communication: Help for the tongue tied*. Health Service Journal. [www.hsj.co.uk](http://www.hsj.co.uk)

Westbrook, D., Kirk, J. (2005) *The Clinical Effectiveness of Cognitive Behavioural Therapy: Outcome For A Large Sample of Adults Treated in Routine Practice*. Behaviour Research and Therapy. 43, 1243-1261

Yapko, M. (1981a). *The effect of matching primary representational system predicates on hypnotic relaxation*. American Journal of Clinical Hypnosis, 23, 169-175.

Yapko, M. (1981b). *Neuro-Linguistic Programming, hypnosis, and interpersonal influence* Doctoral dissertation, United States International University, 1980. Dissertation Abstracts International, 41, 3204B. (University Microfilms No.81-033, 93) Accession Number: 00001192-198510000-00011

Yapko, M. D. (1984) *Implications of the Ericksonian and Neurolinguistic programming approaches for responsibility of therapeutic outcomes*. American Journal of Clinical Hypnotherapy. Oct, Vol. 27(2) pp. 137-43.

Young, G. (2006) *Hypnotically-facilitated eclectic psychotherapeutic treatment of depression: A case study*. Australian Journal of Clinical Hypnotherapy and Hypnosis. 27(1)(pp 1-13)

Zika, B., (1985) *Transformational hypnotherapy: Historical antecedents and a case example*. Australian Journal of Clinical Hypnotherapy and Hypnosis. Vol 6(2). 57-66

## Appendix 1 – Search Strategy

Database	Words/Phrases Used	Documents retrieved
National Electronic Library for Health: Cochrane Library All Dates	Neurolinguistic Psychotherapy; Neurolinguistic; NLP; Anxiety; Depression;  Combination of 1&4; 1&5; 2&4, 2&5, 3&4, 3&5.	1
Psycinfo: All Dates	Neurolinguistic Psychotherapy; Neurolinguistic; NLP;	1

	<p>Anxiety;</p> <p>Depression;</p> <p>Combination of 1&amp;4; 1&amp;5; 2&amp;4, 2&amp;5, 3&amp;4, 3&amp;5.</p>	
Ovid Medline	<p>Neurolinguistic</p> <p>Psychotherapy;</p> <p>Neurolinguistic;</p> <p>NLP;</p> <p>Anxiety;</p> <p>Depression;</p> <p>Combination of 1&amp;4; 1&amp;5; 2&amp;4, 2&amp;5, 3&amp;4, 3&amp;5.</p>	1
Embase	<p>Neurolinguistic</p> <p>Psychotherapy;</p> <p>Neurolinguistic;</p> <p>NLP;</p> <p>Anxiety;</p> <p>Depression;</p>	2

	Combination of 1&4; 1&5; 2&4, 2&5, 3&4, 3&5.	
CINAHL	Neurolinguistic Psychotherapy; Neurolinguistic; NLP; Anxiety; Depression;  Combination of 1&4; 1&5; 2&4, 2&5, 3&4, 3&5.	1
Ovid	Neurolinguistic Psychotherapy; Neurolinguistic; NLP; Anxiety; Depression;  Combination of 1&4; 1&5; 2&4, 2&5, 3&4, 3&5.	4

<a href="http://www.nlp.de/cgi-bin/research/nlp-rdb.cgi">http://www.nlp.de/cgi-bin/research/nlp-rdb.cgi</a>	Anxiety Depression Combination of 1&2	7
<a href="http://www.nlpco.com/pages/research/index.php">http://www.nlpco.com/pages/research/index.php</a>	Anxiety Depression Combination of 1&2	3
<a href="http://www.nlpiash.org">http://www.nlpiash.org</a>	Anxiety Depression Combination of 1&2	14
Resolve: A New Model of Therapy, Bolstad	Anxiety Depression Psychotherapy	

## Appendix 2 – CASP Analysis of Research Papers

<b>Research Paper</b>	<b>Screening Aims</b>	<b>Screening Methodology</b>	<b>Rigour</b>	<b>Credibility</b>	<b>Relevance</b>
Allen, K.L.	Yes	Yes	Yes	Yes	No – Phobia specific
Einspruch & Forman 1985	Yes	Yes	Yes	Yes	No – Phobia specific
Einspruch & Forman 1988	Yes	Yes	Yes	Yes	Yes
Ferguson D. M.	Yes	Yes	Yes	Yes	No – Phobia specific
Field E.S.	No	No			
Genser-Medlitsch, & Schutz	Yes	Yes	Yes	Yes	Yes
Hale, R.	Yes	Yes	Yes	Yes	No – Anxiety context specific
Hossack, A. Standidge, K	Yes	Yes	Yes	Yes	Yes
Kammer et al	Yes	Yes	Yes	Yes	No – Phobia specific
Konefal et al	Yes	Yes	Yes	Yes	Yes

Koziey et al	Yes	Yes	Yes	Yes	No – Anxiety context specific
Krugman et al	Yes	Yes	Yes	Yes	No – Anxiety context specific
Lieberman	Yes	Yes	Yes	Yes	No – Phobia specific
Rogers S	No	No			
Rosa N	No	No			
Selley A	No	No			
Stanton H 1988	No	No			
Stanton J 1996	No	No			
Yapko, M.	No	No			
Young, G.	No	No			
Zika B.	No	No			

### Appendix 3 – Developing Research Evidence

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 12
Meet with Local Medical Committee (LMC) to discuss findings	✓					
Negotiate with LMC to approach local GPs	✓					
Consider ethical application to UK Council for Psychotherapy and LMC		✓				
Identify GP Practices who wish to be involved			✓			
Agree protocols for referral				✓		
Identify client group				✓		
Commence therapy intervention					✓	
Evaluate findings						✓
Publish findings						✓
Make recommendations for ongoing practice						✓