## Title:

An investigation into how Neuro-Linguistic Programming can be added to Positive Psychology as a source of interventions to increase self-esteem and subjective well-being in psychologically healthy populations.

**Key words:** Positive Psychology, Neuro-Linguistic Programming (NLP), Self-esteem, Subjective Well-Being

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Enrolment date: Feb 2007

Module Code: PYM706

# **Acknowledgements**

The author could not have completed this paper without the support and help provided by both NLP trainers and UEL tutors. In particular thanks go to Ilona Boniwell and Joan Painter for their support, advice and feedback. Thanks also to Nash Popovic for his feedback on the literature review.

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#### **Abstract**

The purpose of this study was to expand the number of positive psychology interventions available that have empirical evidence of effectiveness. In particular this involved introducing techniques used in Neuro-Linguistic Programming (NLP) and demonstrating how such techniques can be used to enhance both self-esteem and subjective well-being. In addition, it was hoped to promote the inclusion of NLP as an appropriate body of work for consideration within the field and provide further data on guestions around self-esteem, well-being and optimism. In particular the question of state versus trait self-esteem and optimism. Three hypotheses were examined: NLP interventions have a positive effect on self-esteem; NLP interventions have a positive effect on subjective well-being; the level of trait optimism predicts who will respond positively to the interventions. A mixed methods sequential approach with a Pragmatic paradigm was adopted. A quantitative method was applied first, followed by a qualitative thematic analysis of individual reflections collected after the intervention and then again at the final measure point. Specifically a 2x3 split plot design with Group (experimental v control) as the betweenparticipants factor and Time (pre-intervention, post-intervention, six week follow-up) as the repeated measures factor was used. The intervention took the form of a one day workshop using NLP interventions. The results indicated that whilst self-esteem and well-being increased across time in the experimental group, no such beneficial effect was observed in the control group. Trait optimism was not found to predict who would respond positively to the interventions. NLP does appear to offer interventions that can be used to increase self-esteem and well-being in a normal population. This supports the suggestion that NLP could be introduced into the field of Positive Psychology.

#### Introduction

The purpose of this study is to expand the number of positive psychology interventions available that have empirical evidence of effectiveness. In particular this involves introducing techniques used in Neuro-Linguistic Programming (NLP) and demonstrating how such techniques can be used to enhance both self-esteem and subjective well-being (SWB).

The author will briefly refer to the current situation with regards to interventions within the positive psychology field (as part of the literature review that follows) followed by definition of terms relevant to this study. To provide a framework an overview of existing NLP research will be discussed and how these relate to this study. Self-esteem and well-being will be placed in a context of positive psychology and mention will be made of controversies. Finally a proposal will be made indicating why NLP might be a suitable intervention both in terms of positive psychology and with regard to self-esteem and well-being.

Self-esteem can be described as how much value a person places on themselves, their self-worth and their capabilities (Baumeister et al 2003). Global self-esteem equates to an overall sense of self-worth with sub-types or domains of self-esteem

in particular contexts such as relationships, work, body image and peer groups (Mruk 1999). Self-esteem can be either a trait or a state and is applied to both global and domain specific versions by different people (Crocker and Wolfe 2001). Crocker & Park (2004) suggest that trait self-esteem is likely to be stable over time while state self-esteem is perhaps more changeable. With this in mind the current study will focus on state self-esteem.

There has been much debate as to the value of self-esteem and questioning of whether high self-esteem is psychologically healthy, adaptive and good for people (Pyszczynski & Cox 2004). Baumeister et al (2003) suggest that the benefits of trait self-esteem are minimal and Bushman and Baumeister (1998 cited in Pyszczynski & Cox 2004) take this further suggesting that high levels of unstable self-esteem can lead to violence when it is threatened. Baumeister et al (2003) challenge some of the interpretations of research suggesting negative benefits associated with selfesteem are related to problems in methodology; for example, measurement problems, social desirability biases, ambiguous meaning to questionnaire items, the heterogeneity of high self-esteem and the lack of clarity regarding global and domain self-esteem (Pyszczynski & Cox 2004). It has been suggested that high selfesteem may in some instances be an indicator of narcissism (Baumeister et al 2003). This could raise concerns regarding the danger of encouraging society to pursue self-esteem that may result in narcissistic tendencies. Indeed one criticism of the self-esteem movement has been that it encourages selfishness (Baumeister et al 2003). The pursuit of self-esteem on the surface appears to provide benefits if successful in that the individual may experience a temporary boost to positive affect (Crocker, Karpinski et.al 2003: Crocker et al., 2002, Lewis 1993: Mascolo & Fisher 1995: cited in Crocker & Park 2004). For the purposes of this study the author will assume that enhancing self-esteem is positive and to be desired.

The over-reliance of self-report questionnaires where people may be answering with socially acceptable responses and the lack of any truly objective measures may throw suspicion on any conclusions drawn (Baumeister et al 2003). Despite the criticisms the Rosenberg Scale is particularly robust demonstrating high reliability for test, re-test. There are also some difficulties in distinguishing between people with narcissistic tendencies and those with genuine high self-esteem (Baumeister et al 2003). In the absence of more objective measures such measures will be used for this study.

Subjective well-being (SWB) can be described as the evaluation by the individual of whether or not they are experiencing "the good life" (Diener 2000). This model allows that SWB is a cognitive judgement that one makes about one's own life as perceived when compared to a self-imposed set of criteria (Pavot & Diener 1993). Some researchers seem to use SWB and Life Satisfaction interchangeably (e.g. Fujita and Diener 2005) which could give rise to some confusion in definition. This study will measure changes in SWB.

SBW is viewed as a central theme within positive psychology partly due to the amount of interest shown by governments in various countries (Diener 2000). As with several other concepts in positive psychology, there is a suggestion that SWB

has a set point and Fujita & Diener (2005) go further arguing that perhaps interventions are unlikely to have an impact. On investigation Fujita & Diener (2005) found that some individuals do change substantially and significantly over time giving some evidence to support the concept of a "soft baseline" for life satisfaction. The assumption that SWB has a "soft baseline" is an assumption applied to this study.

Optimism can be described as an explanatory style (state) (Seligman 1998) on the one hand and conceptualised as a broad personality trait known as dispositional optimism on the other (Scheier & Carver 1985). Dispositional optimism can be defined as the global expectation that more "good" things than "bad" will happen in the future (Scheier and Carver 1985). As part of this study attention will be given to the degree to which optimism predicts the amount of change experienced as a result of an intervention.

NLP is a future focused methodology. In most cases interventions are designed to change thinking processes rather than explore negative memories (Tosey & Mathison 2003). This approach tends to be positive and about improving positive affect which in the author's opinion makes it a good fit for Positive Psychology. In the past NLP has had a poor reputation academically (e.g. Wood 2006, Elich,Thompson and Miller 1985) with just a few exceptions (e.g. Crandell 1989, Koziey and McLeod 1987). This study intends to provide some critical challenges to some of these negative perceptions. The author conducted a pilot study in 2007 (see appendix 1 for results) suggesting that NLP does have something to offer the field of Positive Psychology in the form of interventions. The pilot study supported the proposition that NLP will have a positive effect on self-esteem and self-efficacy. Results regarding optimism were less clear possibly supporting the suggestion that optimism may be a trait (Scheier & Carver 1985). Anecdotal comments from participants of this pilot study provided additional points of interest.

The original study considered both self-esteem and self-efficacy, however there is evidence that suggests that the correlations between these two factors may indicate that what they measure is similar. Therefore this study will introduce subjective well-being to replace self-efficacy, the author predicted this will also be enhanced by the proposed interventions. This study will also examine the possible impact of trait optimism on participants changes in self-esteem and well-being.

The epistemology position of this study adopts the Pragmatic approach where the methods used rather than adhering to a particular philosophical standpoint are appropriate to the research questions under investigation (Bryman 2006). This stance considers the terms quantitative and qualitative to refer to two sets of methods for collecting and analysing data (Bryman 2006). Combining methods from these two sets is a practical, appropriate step resulting in a single mixed methods approach (Bryman 2006).

There were three proposed hypotheses for the quantitative element of this proposal:

- 1. NLP interventions have a positive effect on self-esteem.
- 2. NLP interventions have a positive effect on subjective well-being.
- 3. The level of trait optimism predicts who will respond positively to the interventions?

The qualitative element involved asking participants to complete a short narrative describing the following:

- ❖ How do you feel/think the workshop has impacted on your self-esteem?
- How do you feel/think the workshop has impacted on your perception of your satisfaction with life?

Six weeks later the following question was presented:

What changes have you noticed in your self-esteem and well-being since the workshop?

A thematic content analysis was used to analysis participants responses (Braun & Clarke 2006).

The author acknowledges a similar position to NLP as reported by Tosey & Mathison (2003, p. 373) "while we do not claim to be neutral on the subject, neither do we consider ourselves over-identified with the world of NLP". The author is an NLP Master Practitioner and a licensed trainer accredited by Richard Bandler and the Society of NLP. She has also trained with other leading trainers such as John La Valle, Robert Dilts, John Overdurf, Julie Silverthorn and Stephen Brookes.

This study takes the position that self-esteem and subjective well-being are to be desired and that NLP may provide interventions that lead to boosts in both of these areas.

# Literature Review: NLP as a source of interventions for Positive Psychology

This literature review intends to provide some critical challenges to some of these negative perceptions reported in earlier literature (e.g. Wood 2006, Elich, Thompson and Miller 1985). The focus will be on NLP, in particular the historical framework, research available within the literature and links to interventions to be explored by the current study. Self-esteem, well-being and optimism have all been extensively reviewed in the past (e.g. Baumeister et al 2003; Crocker and Wolfe 2001; Diener 2000; Scheier & Carver 1985) so will not be included in this paper. The main questions addressed by this literature review are:

- What evidence does existing research offer on the effectiveness of NLP as an intervention?
- ❖ What interventions can NLP offer to enrich positive psychology?
- What direction could future research take?

Before answering these questions it is important to set a context setting out the current situation in positive psychology. In considering the range of positive interventions developed within positive psychology some researchers suggest happiness (and other concepts) have a genetically determined set point making interventions at best short term in effect (Sheldon & Lyubomirsky 2004). Issues such as the hedonic treadmill (Brickman & Campbell 1971 in Sheldon & Lyubomirsky 2004) offer further pessimism, as does the suggestion that personality trait may also play a part. The author rejects this position, preferring to take the view that change is possible.

The amount of data currently available to support the notion that positive psychology interventions produce sustainable results is limited although growing. The main lack is in longitudinal studies and those using controlled conditions. Seligman et al (2005) undertook a research project to investigate and compare several interventions. The 'three positive things' exercise and using Signature Strengths were the most effective and these effects were still evident three and six months later. Six months is still a short time span for a longitudinal study and the people in the placebo condition also experienced improvement suggesting that perhaps receiving an assigned task from a psychologist may have been enough to boost happiness (Frank 1973 in Seligman et al 2005). Seligman et al (2005) suggest that the results could have been even better if there had been a "hands on" component where the relationship with the therapist/coach may have magnified the results. Although these results are promising it should be noted that the sample were all self selected and may have had high intrinsic levels of motivation (which perhaps further explains the placebo effect).

A number of other interventions have provided positive empirical evidence on their effectiveness including positive portfolio, Quality of Life Therapy, Expressive Writing Paradigm, physical exercise, positive reminiscence, gratitude, altruism and forgiveness (Bsiwas-Diener & Dean 2007). Space does not allow for further critical evaluation here however Sheldon & Lyubomirsky (2004) make a valid point when they suggest that the skill of positive psychology interventions lies with matching the

appropriate intervention with the appropriate client. Not all interventions, empirically tested or not will work with all participants.

NLP has been defined as the systematic links between the individual's internal experience (neuro), their language (linguistic) and patterns of behaviour (programming) (Tosey & Mathison 2003). Any links to computer programming and neuroscience can be regarded as metaphorical. (See appendix 3 for additional terminology).

A relatively small number of studies have examined NLP and of those most have focused on the "eye accessing" model (Tosey & Mathison 2003). The reason for the apparent lack of interest in studying this field further is open to speculation. This lack of interest could be considered surprising when it is noted that NLP is one of the most popular forms of interpersonal skills and communication training available with over fifty NLP training organisations in the UK alone (Tosey & Mathison 2003). Tosey and Mathison (2003) suggest several possible solutions, firstly NLP does not fit any one discipline enough to become mainstream; or perhaps suggestions that NLP is a manipulative approach discourages research (although controversy is often seen as a good reason to research further); or that it developed from the "non-serious" Californian culture of the 1970's so was not "worthy" of more interest.

Much of the existing research about NLP has focused on taking a small technique in isolation to in some cases confirm or deny the techniques existence (e.g. Wood 2006, Elich, Thompson & Miller 1985 see appendix for more details) while a few studies have endeavoured to test for effectiveness of NLP interventions e.g.(Crandell 1989, Koziey and McLeod 1987). Many of the studies seemed to lack a basic understanding of the theoretical framework of NLP and how a number of overarching techniques are used in concert with one another.

NLP borrows from many other disciplines in constructing a frame-work of interventions. The earliest work in NLP was based on modelling the work of people such as Fritz Perls, Virginia Satir, Milton Erikson and Gregory Bateson. The eclectic nature of NLP is very clear as noted by Tosey and Mathison (2003, p375):

"...within NLP one can detect influences from Gestalt therapy (Perls 1969), person-centred counselling (Rogers 1961), transformational grammar (Grinder & Elgin 1973, behavioural psychology and cybernetics (Ashby 1965), the Palo Alto school of brief therapy (Watszlawick et al 1967), Ericksonian hypnotherapy (Bandler & Grinder 1975b: Grinder et al 1977) and most importantly the cybernetic epistemology of Gregory Bateson (Bateson 1972)."

The work of Satir and Erikson produced the two major language patterns that underpin NLP, the Meta-model and Milton model respectively (Bandler & Grinder 1975, 1976). The modelling process used by Bandler and Grinder focused on analysing how the brain (Neuro) works by examining the language patterns (Linguistic) and observing the non-verbal aspects of communication (Dilts & De Lozier 2000). Emerging from this study were step by step strategies or programs (programming) that were then used to transfer the modelled skill to other people

and other applications (Dilts & De Lozier 2000). Some of the techniques developed in conjunction with this modelling are detailed in Peltier (2001) such as indirect suggestion, the use of ambiguity, specific language patterns and reframing. He also mentions modelling, use of imagery, story-telling and metaphor, all key interventions in NLP. Peltier (2001) points to these as creative, useful "non-linear" techniques that can help clients to shift but cautions that some are manipulative. Dilts and De Lozier (2000) acknowledge that NLP is drawn from disciplines such as neurology, linguistics and cognition as well as computer programming and systems theory with the intention of synthesising these theories into a single structure.

In the early development of NLP there was little emphasis on the need to generate a complete theory, focus was instead directed toward developing practical listening and observational skills (Tosey & Mathison 2003). Bandler and Grinder took a deliberately provocative stance challenging the effectiveness of existing therapies and assumptions that personal change required long term therapy (Tosey & Mathison 2003).

One of the fundamental assumptions of NLP is that people are whole and have all the resources they need (Koziey & McLeod 1987), this assumption can be traced back to Erickson, Rossi and Rossi (1976 in Koziey & McLeod 1987) and Satir (1972 in Koziey & McLeod 1987). This position suggests that problems do not arise from any lack of personal resources or scarcity in the external world but rather from problems in accessing available internal resources (Koziey & McLeod 1987). These assumptions later became part of the underlying philosophy of NLP, the presuppositions and provide practitioners and coaches with a positive approach, the author proposes that this would be appropriate in positive psychology also. While it could be argued that this position is merely a variation on Rogers (1951) "positive regard" the idea of "holding a positive internal representation" (Overdurf and Silverthorn 1994) of the client goes one step further. By believing in the client's ability to change the coach projects a positive attitude providing an environment supportive of change. The expectancy of the coach has an impact on the amount of change the client experiences (Overdurf and Silverthorn 1994). This approach does lack empirical evidence however links could be made to the "Pygmalion phenomenon" where teachers expectations of pupils were high and these expectations were reflected in the performance of students one year later (Rosenthal and Jacobson 1992).

The meta-model identified by modelling the language patterns of Satir and Perls could be considered the core model of NLP (Tosey & Mathison 2003) and yet few of the academic studies exploring NLP even mention it. The NLP communication model suggests that human experience while in some ways shaped by external stimuli is also affected by changes to the individual's sensory patterns of the world (Bandler & Grinder 1975). Three key processes were identified, generalisations, deletions and distortions that may cause problems in the structure and patterns of cognitive maps (Bandler & Grinder 1975). Meta-model provides an intervention based on use of questions that helps the client re-assess perceptions, gain insight, challenge limited thinking and shape goals into attainable action plans. This model would benefit from further research to test effectiveness.

The second pattern, the Milton Model is used to communicate more directly with the unconscious using language that is artfully vague (Bandler & Grinder 1975) both conversationally and within trance inductions using ambiguity and metaphor. Gordon (1978) suggests that metaphors are powerful agents of change because they cause the client to initiate a transderivational search in order to create personal meaning from what is being said. If the client is in a healing environment they will unconsciously seek meaning that is congruent with their desired outcome. While there is no obvious evidence to support this theory metaphor has been an accepted intervention in psychology used by for example both Freud and Jung. The search for meaning links to positive psychology and eudaimonic well-being (e.g. Bains et al 2007). There is mixed evidence regarding the use of hypnosis with many studies showing benefits while others show little compelling evidence (Heap & Aravind 2002). There does not appear to be any research into the use of conversational intervention patterns. This gap could prove an interesting area for further research.

NLP has long proposed that a time-line can be used as a metaphor in guided processes (e.g. James & Woodsmall 1988). A recent study found evidence for a spatial mental representation of time with spatial-temporal response codes to the organisation of events in time (Ishihara et al 2008). A number of NLP interventions use time-line most involving the client making changes to their internal representation in such a way that they either release limiting states or increase positive states in both a past and future orientation (e.g. Overdurf & Silverthorn 2000). Evidence for these techniques is anecdotal and difficult to measure as results rely almost entirely on self report of subjective experiences, in other words the client reports feeling better. The only external measure is also subjective and relies on the practitioner's ability to "calibrate" a significant shift in physiology (e.g. Overdurf & Silverthorn 2000). This shift is used to assess change in the client's internal representational system. Calibration is taught to NLP practitioners however the only research into this has focused almost entirely on eye accessing cues, a very small part of this process (e.g. see Sharpley 1984 for examples in appendix 2).

Two case reports were used to explore the effectiveness of NLP in treating rapeinduced anxiety and phobic reactions (Koziey & McLeod 1987). Koziey & McLeod (1987, p. 277) applied generalisations, deletions and distortions (meta-model) as an explanation for the reaction of the rape victim:

"For example, the experience with the rapist can come to stand for the experience with all men (generalisation). Despite numerous subsequent positive experiences with men this attitude does not change (deletion). When caring family and friends point out discrepancies in logic or behaviour, the process of distortion allows the inconsistency to remain, the model to remain intact, and the problem remain unresolved."

The NLP intervention used in both case studies (Koziey & McLeod 1987) was the three place visual-kinaesthetic dissociation (Cameron-Bandler 1985) also known as the Fast Phobia Cure (Bandler 1985). This technique was a refinement of an earlier technique used by Fromm (1965 in Koziey & McLeod 1987). The process involves the patient watching themselves from a third position (watching themselves, watching themselves) (Cameron-Bandler 1985). This allows the person to remain

comfortable while remembering the unpleasant memory because the feeling (kinaesthetic) element has been disassociated from the visual memory (Cameron-Bandler 1985). This intervention is particularly relevant for people experiencing PTS caught in repeating cognitive patterns where they fully re-experience unpleasant feelings from the past (Cameron-Bandler 1985; Bandler 1985). Bandler, Grinder and colleagues noticed that most people naturally dissociated from unpleasant memories meaning they could recall the event and use any learning acquired without also re-experiencing the feelings (Cameron-Bandler 1985). The three place visual-kinaesthetic dissociation resets this natural mechanism (Cameron-Bandler 1985).

Leslie Cameron-Bandler (1985, p.153) used this technique successfully with a rape victim, Jessica. Jessica was so traumatised by her experience that she could not bear male medical staff to care for her, refused to see her boyfriend and was unable to tell the police what happened because any reference to the incident triggered a psychotic episode. She invested time in building trust and rapport with Jessica setting strong positive anchors of safety and security (see below for a definition of anchoring). At the fourth session she took Jessica successfully through the three place v-k dissociation. Cameron-Bandler (1985) saw Jessica for a number of sessions after this consolidating the process and helping her get to a state where she could give a witness statement.

Koziey & McLeod (1987) provide a simple definition of anchoring, an anchor is any stimulus that has been associated with a particular response. While the behaviouristic stimulus-response model can be linked to anchoring there are major differences (Dilts et al 1980). Although conditioning will certainly strengthen an anchor the initial experience provides a single trial learning (Dilts et al 1980). Reinforcement and reward are not necessary and internal processes are considered as important as external cues, for example internal dialogue, mental strategies and feelings are just as representative of a response as Pavlov's salivating dogs (Dilts et al 1980).

In NLP, a synaesthesia is where there are crossover connections between representational systems where activity in a representational system automatically causes activity in another (Dilts et al 1980). Examples from Dilts et al (1980) are:

- A-K harsh tone feel uncomfortable
- V-K sight of blood feel sick
- A-V hear music see beautiful images

Issues such as fear, anxiety and phobic responses are, according to NLP a function of the inter-related processes of anchoring and synaesthesia (Koziey & McLeod 1987).

The interventions applied by Koziey & McLeod (1987) took into account anchoring and synaesthesia's and were based on the model of three place v-k dissociation (Cameron-Bandler 1985). Koziey & McLeod (1987) case studies results were favourable and consistent with those reported by Cameron-Bandler (1985) and Bandler (1985). It was noted that both subjects utilised the treatments differently

demonstrating the importance of a flexible approach when applying interventions (Koziey & McLeod 1987). Koziey & McLeod (1987) suggest that the metaphorical nature of the technique seemed to allow each subject to use what approach would best facilitate her own unique style of learning and recovery (Koziey & McLeod 1987). In common with other NLP interventions the effectiveness was measured based on the client's reporting of their subjective experience. While it was also possible to observe changes in behaviour cause and effect could only be speculated on. The nature of Koziey & McLeod (1987) study make it difficult to replicate, ethical issues mean the use of control subjects would be inappropriate and the varied nature of trauma may also make this difficult gather empirical evidence. Used with non-traumatised subjects it may be possible to measure changes and compare to a control group without ethical problems. This approach will be used in the current study together with the time line based techniques of Overdurf & Silverthorn (2000).

Crandell (1989) describes brief therapy for an adult child of alcoholic parents crediting NLP techniques of anchoring and accessing resources. Crandell (1989) references Bandler and Grinder's (1979) book Frogs into Princes in which the Six Step Reframe is introduced after comparing the difference between "normality" and someone experiencing multiple personalities (Dissociative Identity Disorder). Bandler and Grinder (1979) assert that thinking of ourselves as having parts is normal and that only specific clinical definitions move the individual into the abnormal behaviour e.g. over compartmentalising the parts. Unfortunately Crandell (1989) took a step that would not be recommended in NLP of asking the client to name her parts as Elizabeth and Kay. This would not be recommended in NLP as it seems to be taking dissociation to a dangerous level particularly as there is no mention of the parts being re-integrated. NLP does work with parts however there is always an emphasis on re-integration at the end of a brief intervention something Crandell (1989) fails to do. Despite this Crandell (1989) did report positive results for the client he used this technique with however the lack of appropriate "ecology checks" means that it is a dubious test of NLP and the results should be treated with caution.

In conclusion, NLP has many interventions that could be used in positive psychology however what is lacking is empirical evidence. The existing evidence does present some optimism for the effectiveness of the interventions on offer. In July 2008 the first NLP research conference was hosted by the University of Surrey with representatives from fourteen universities present. There are many areas of NLP that could benefit from further research and hopefully this will now begin to happen as a shift in attitudes appears to be in progress. The fields of cognitive neuroscience and cognitive linguistics also seem to have research that could shed light on NLP processes, could mirror neurons (Iacoboni 2008) for instance have some relevance to rapport building and matching? The work of Ishihara et al (2008) provides interesting questions about how we represent time, space and experience, could this be linked to research into how NLP change processes work? Even the issue of eye accessing cues may be investigated more scientifically using eye-tracking technology (Diamantopoulos 2008).

### **Method**

#### **Design**

The epistemology position of this study adopts the Pragmatic approach where the methods used rather than adhering to a particular philosophical standpoint are appropriate to the research questions under investigation (Bryman 2006b). This stance considers the terms quantitative and qualitative to refer to two sets of methods for collecting and analysing data (Bryman 2006b). Combining methods from these two sets is a practical, appropriate step resulting in a single mixed methods approach (Bryman 2006b). An alternate opinion suggest that pragmatism does have a philosophical position which could be described as "the truth is what works" and this approach has roots that go back to James, Pierce and Dewey (Cherryholmes 1992, Howe 1988 in Robson 2002).

Debates about the suitability of mixed method approaches have ranged between philosophical and technical perspectives (Bryman 1984 in Bryman 2006b). From an epistemological perspective it could be argued that the two approaches are incompatible and such combinations could be viewed as superficial (e.g. Smith & Heshusius 1986 in Bryman 2006b). The technical perspective lends itself to the combining of methods as a practical solution to answering research questions (Bryman 2006b). Concerns about mixing methods include the perception that such an approach is just a fad and seen to be favoured by funding bodies (Bryman 2006b). The implications of this is the suggestion that research will not be fully thought through resulting in poor quality research (Bryman 2006b). Bryman (2006b) interviewed other researchers on the issue of quality and discovered many unanswered questions requiring further debate. These questions are largely unanswered and likely to be topic of future debate in the literature below is a summary of the key points (Bryman 2006b):

- The use of convergent criteria where the criteria is the same for both quantitative and qualitative comments of a study.
- Or should there be separate criteria for each.
- Would it be more appropriate to develop bespoke criteria that apply specifically to mixed-methods research.
- Does one method appearing dominant over the other influence the criteria selected for quality assurance?

Greene et al (1989 in Bryman 2006a) suggested five different justifications for combining quantitative and qualitative methods; triangulation, complementarity, development, initiation and expansion. The author chose complementarity as a means to "seek elaboration, enhancement, illustration, clarification of the results of one method with the results from another" (Greene et al 1989 in Bryman 2006a).

A mixed methods sequential approach with a Pragmatic paradigm will provide richness to the data for interpretation. A quantitative method will be applied first, followed by qualitative content analysis of individual reflections collected after the intervention and then again at the final measure point aimed at expanding on these findings. This will be a 2x3 split plot design with Group (experimental v control) as

the between-participants factor and Time (pre-intervention, post-intervention, six week follow-up) as the repeated measures factor. Three questionnaires will be used for the quantitative element (see appendix 1).

A reflective diary structured around three questions will be used for the qualitative aspect of the study. Participants will be asked to complete a half page entry directly after the intervention and again six weeks later.

The intervention will take the form of a one day workshop using NLP interventions. As far as is practical the interventions will be the same or similar to those used in pilot study. The author will choose interventions from the pilot nine day programme based on anecdotal feedback and personal experience. All interventions and data collection will be straightforward and will not involve deceit.

A number of aspects of this design will need to be considered when interpreting the data. In common with the pilot study, it is possible that participants may experience change based on the relationship with the tutor and teaching style (Seligman et al 2005). There may also be effects from being part of a warm, supportive group. There may also be an opposite factor, the pilot group was ten people which allowed for a lot of personal interactions and a sense of team identity. A larger group of thirty may offer less opportunities of this kind so may reduce the group dynamic impact. The original study was based on a nine day intensive programme covering an entire NLP Practitioner training. This study will be a shorter one day event with fewer interventions. The challenge for the author is to select interventions that will still produce an improvement in self-esteem and well-being. The reduction from nine days to one may mean that the cumulative effect of multiple interventions is lost.

There are areas of potential research bias within this study that need to be acknowledged and where possible avoided. The importance of reflexivity, awareness of how the researchers social identity and background can impact on the study must be considered (Robson 2002). The author already holds subjective opinions and beliefs about the effectiveness of NLP as an intervention. She holds both a Master Practitioner and Licensed Trainer of NLP certificate plus a Diploma in Ericksoninan Hypnotherapy, NLP and Psychotherapy. She regularly runs training courses qualifying people as both practitioners and master practitioners. This means that particular care must be taken when interpreting the data to ensure that an objective position is maintained when reporting the findings. Reflexivity will allow acknowledgement of any personal feelings, opinions or beliefs that need to be set aside in order to avoid bias. The author will also be delivering the interventions on the workshop and this could mean further potential for bias. In order to remain reflexive the author will keep a reflexive diary throughout the study and discuss any areas of potential bias with her supervisor.

#### **Participants**

The sample for this group will be gathered from a variety of sources. The first will be to invite people who have shown interest in attending an NLP Practitioner training course but have not until now attended a course. The second source will be via local businesses where staff have shown interest in personal development and NLP. This

type of non-probability sampling is based on convenience and is akin to snowball sampling (Bryman 2001). This means the sample is being recruited from existing business contacts of the author with potential participants being invited to pass on the invitation to take part in the study to others. While it is possible that the outcome will be a representative sample it may mean that there could be problems generalising the results unless a normal distribution can be demonstrated.

The aim will be to recruit a minimum of 60 participants to allow for 30 in the experimental group and 30 in the control group. On conclusion of the quantitative element a small number of participants will be selected from the experimental group for the qualitative element.

Ideally the author would prefer to randomly allocate participants to conditions in a systematic way. This may not be practical. The most likely procedure will be to offer potential participants a choice of two dates and allow them to self-select the most convenient. This will still provide a random element as participants will not know in advance which group is the experimental and which the control. Some participants may deduce which group they are in which could have some impact on the results, for instance if someone knows they are in the experimental group they may respond to expectation factors.

All participants will be informed in full, prior to the study, what is expected of them if they agree to participate (see consent form in appendix 2). Their right to withdraw at any time will be explained.

The smaller sample needed for the qualitative element will be selected based on the results of the second measure. The three participants showing the most improvement in self-esteem and well-being and the least improvement will be selected to explore how subjective perceptions relate to questionnaire results making a total sample of six participants.

#### **Data collection**

The method of data collection will be in the form of self-report questionnaires and a short reflective diary based on three questions. There is a risk of data collection errors, for example the over-reliance on self-report questionnaires (Bryman 2001). Although the questionnaires selected are all well established they still rely on the participants own perception of their experience and could be open to social desirability responses. Further problems could arise collecting data at all the appropriate time intervals. From an NLP perspective there could also be issues with regard to the wording of the qualitative questions. They will need to be "clean questions" avoiding wording which might lead participants in a particular direction (Bandler and Grinder 1975/ 1976). Participants may also be influenced by the relationship they develop with the author. The author will be facilitating the workshops which may mean that participants could answer questionnaires and the reflective diary in a way designed to gain the facilitators approval in a similar way to the issues of social desirabitity.

The Rosenberg Self-Esteem Scale (Rosenberg 1965) is the most widely used measure for global self-esteem and it has high internal reliability (alpha 0.92) (Heatherton & Wyland 2003). It has been criticised because it may be measuring two separate factors, positive and negative (Carmines & Zeller 1974 in Heatherton & Wyland 2003). This has been countered with suggestions that wording of items may have caused this effect as both factors correlated very closely with a criterion variable in direction, consistency and strength suggesting that they are associated with the same general construct (Rosenberg 1979 in Heatherton & Wyland 2003). There is some evidence to suggest that a significant relationship exists between positive self-esteem and academic self-efficacy (Ang et al 2006).

The ten item scale contains five positively worded and five negatively worded items. A four point Likert scale is used ranging from 3 (strongly agree) to 0 (strongly disagree). Typical scores are around 22 with most people scoring between 15-25 (Heatherton & Wyland 2003).

The second scale chosen for this study is the Satisfaction with Life Scale (Pavot & Diener 1993). This scale was developed from a 48 item scale which was first reduced to 10 items and then later to 5 to eliminate redundancies of wording (Pavot & Diener 1993). Moderate temporal stability and strong internal reliability have been reported with a co-efficient alpha of .87 and a two month test-retest coefficient of .82 (Diener et al 1985). Although this test-retest stability declines over longer time periods this level is useful for the current study where a second post intervention measure will be taken after 6 weeks.

A 7 point Likert scale is used ranging from strongly disagree (1) to strongly agree (7). There are five items on the scale.

The final scale chosen for this study is the Life Orientation Test-Revised (Scheier, Carver & Bridges 1994). It was developed to replace the earlier version (Scheier & Carver 1985) and has good internal consistency and is considered stable over time. One of the issues with the earlier version seems to have been overcome now that the positive and negative subsets have a better relationship. There is a continuous distribution of scores with only slight skewing towards optimistic (Carver and Scheier 2003). There is a possibility that the LOT-R is measuring two distinct dimensions, there are some biological explanations offered for this (Watson and Tellegen 1985 in Carver and Scheier 2003) that there is not space to explore further here. The LOT-R may be more a measure of trait than state optimism and pessimism (Burke et al 2000) so may not change over the course of this study.

The questionnaire itself has six coded items of which three are coded for optimism and three for pessimism and there are four filler items. The scoring uses a five point Likert scale ranging from strongly disagree to strongly agree.

All three scales are in the public domain and the authors have explicitly given permission for their use without consultation.

The Rosenberg Self-Esteem Scale (Rosenberg 1965) and the Satisfaction with Life Scale (Pavot & Diener 1993) measures will be collected at three intervals, before, just after and six weeks after the intervention. The Life Orientation Test-Revised (Scheier, Carver & Bridges 1994) will be collected at the beginning of the study and will be used as part of the regression analysis.

The qualitative aspect will involve three brief open questions inviting participants to expand on their experience and perception of the intervention on well-being, self-esteem and other factors that participants consider relevant. This will then be analysed using qualitative thematic analysis to form the qualitative element of the programme.

The data collected will be subject to Data protection legislation. All personal data will be destroyed on conclusion of the study and will until that time be stored securely both electronically and with respect to hard copies.

### **Data analysis**

For the quantitative aspect of this design a  $2 \times 3$  split-plot anova will be used with Time (pre-workshop v post-workshop v six weeks follow up) as the repeated measures factor and Group (intervention group v control group) as the between participants factor.

A moderation regression analysis will also be carried out in order to investigate whether the improvement in self-esteem/ well being varies as a function of trait optimism, with pre-self-esteem as the predictor variable, post self-esteem as the outcome variable and optimism as the moderating variable..

A qualitative bottom up thematic analysis will be used on the short reflective diaries with an inductive approach to analysis. This approach involves the investigator identifying, analysing and reporting on themes within data (texts) with the emphasis on allowing the categories to emerge (Braun & Clarke 2006). This emergent approach is likely to mean constant movement between conceptualisation, data collection, analysis and interpretation (Bryman 2001). It will be necessary to make some assumptions in interpreting not just the manifest content but also latent themes (Bryman 2001). The author will use the six phases of thematic analysis summarised in the table below and recommended by Braun & Clarke (2006).

	Phase	Description of the Process		
1	Familiarisation with data	Initial examining of data noting ideas		
2	Initial codes	Systematically coding interesting features		
3	Searching for themes	Collating codes into themes		
4	Reviewing themes	Generating thematic map and checking with levels 1		
		& 2		
5	Defining & naming	Clarifying themes and overall story, ongoing		
	themes	refinement		
6	Producing the report	cing the report Final analysis and selection of extracts, reviewing 8		
		refining		

#### **Ethics and risk assessment**

In a content analysis of nine well-known ethics codes produced by academic social research associations from the USA and the UK eleven categories of ethical behaviour were identified (Bell & Bryman 2007). The author will list each of these categories and state the position concerning this study with each.

- ✓ Harm to participants the research and intervention design are intended to provide benefit to participants. For participants taking part in a study examining self-esteem and well-being may, for individuals, result in some participants needing further support or help. Although this reaction to the study is unlikely a list of professional referrals via BPS, NLP etc will be made available if required. All potential participants will be screened using a self report disclaimer on the consent form to ensure as far as possible that the sample are from a normal population anyone who is currently taking medication for depression or with mental health disorders will be excluded.
- ✓ **Dignity** all activities will maintain personal dignity and participants have the option to withdraw in part or full from both the research and the intervention at any time.
- ✓ **Informed consent** both written and verbal information will be provided to ensure that all participants are in a position to give informed consent. All participants will be given an information sheet detailing in full how the study will be conducted and the purpose of the research. This will ensure that participants can give informed consent. They will then be invited to provide written consent(see appendix 2).
- ✓ Privacy the intervention is a group activity so care will be taken to set up ground rules that all participants are comfortable with and it will be stressed that participants have a right to choose the level of disclosure within the group or with the researcher.
- ✓ **Confidentiality** all data will be stored in accordance with the Data Protection Act in locked filing cabinets and password protected computer files. Computer data will be stored in a spreadsheet without participants names attached. The author will also treat verbal information confidentially.
- ✓ **Anonymity** there will be a need for the researcher to track participants data during the collection process for analysis purposes. As this is a repeated measures study participants will need to be identified, questionnaires will be labelled by participant name. Only the researcher will have access to this information in a locked cabinet. In writing up the study all steps will be taken to maintain anonymity of participants. All paperwork will be shredded no later than twelve months after the completion of the study.
- ✓ **Deception** no deception will be used in this study.

✓ Affiliation – participants will be recruited from business and social networks which may mean that some participants may have a pre-existing relationship with the researcher.

- ✓ Honesty and transparency participants questions will be answered and copies of the completed dissertation will be made available on request once the evaluation process has been completed.
- ✓ Reciprocity the nature of the workshop should participants with benefits in terms of improved self-esteem and well-being.
- ✓ Misrepresentation whatever the outcome of the study the results will be reported in full and questions from participants will be answered in full to avoid misunderstanding or misrepresenting.

An registration form will be sent to any participant wishing to take part in the study (see appendix 2). This form will collect data relating to name, address and contact details. Details of gender, age and ethnicity will also be collected to provide an indication of the level of normal distribution within the sample. All paperwork will be shredded no later than twelve months after the completion of the study.

Control participants will be given the opportunity to complete the workshop after the conclusion of the study. Appropriate public liability insurance is held by the author, policy available on request.

#### **Results**

#### **Ouantitative**

The raw scores from the Rosenberg Self-Esteem Scale (Rosenberg 1965), the Satisfaction with Life Scale (Pavot & Diener 1993) and the Life Orientation Test-Revised (Scheier, Carver & Bridges 1994) scales comprised the data upon which the statistical analyses reported below were performed.

#### **Self-Esteem**

The self-esteem data averaged across participants are presented in Table 1 with standard deviations.

Table 1. Mean Self-Esteem responses with standard deviations in the Experimental and Control conditions as a function of Time

	Experi	Experimental		Control	
	Mean	SD	Mean	SD	
Time1	15.97	4.23	18.07	4.86	
Time2	20.41	4.30	18.07	4.91	
Time3	21.00	4.84	18.53	4.53	

Initially a descriptive statistics analysis was carried out in order to establish if the assumptions of the following analyses were met. This indicated that the distribution of the data in each condition was approximately normal, the standard deviations of each condition were approximately equivalent and there were no extreme scores.

The data were then analysed with a 2x3 split-plot ANOVA with condition (experimental v control) and Time (Time1 v Time 2 v Time3) as factors. (Mauchly's test did not achieve significance so sphericity is assumed in the following reported tests). The main effect for condition did not achieve significance, but a significant main effect was found for Time (F(2,80) = 35.72, p<.001). A post-hoc analysis, with the criterion value for statistical significance set at .033 in order to control the familywise error rate, indicated that Time 1 differed significantly from Time 2 (t(81)=4.79, p<.001) and from Time 3 (t(81)=5.96, p<.001). The remaining pairwise comparison did not achieve significance.

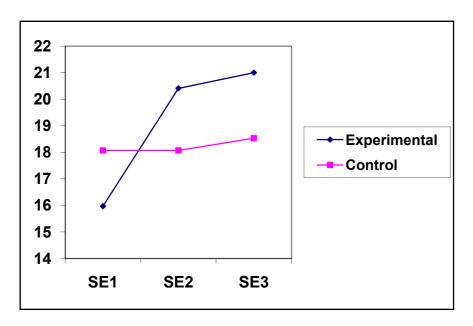


Figure 1. Graphical illustration of the significant interaction between Condition and Time.

This main effect, however, was modified by a significant interaction which was obtained between Condition and Time (F(2,80) = 28.39, p<.001). (See Figure 1 for graphical illustration). The mean self-esteem scores for Time 1, Time 2 and Time 3 in the control condition were 18.07, 18.07 and 18.57 respectively, whereas in the Experimental condition they were 15.97, 20.41 and 21.00 respectively. A simple effects analysis was carried out on the interaction data, with the criterion value for significance set to .004 in order to control the familywise error rate. This revealed significant comparisons between Time 1 and Time 2 (F(1,39) = 49.13, p<.001) and Time 1 and Time 3 (F(1,39) = 71.03, p<.001) in the experimental group. No other comparisons achieved significance.

The results would appear to indicate therefore that whilst self-esteem increased across time in the experimental group, no such beneficial effect was observed in the control group.

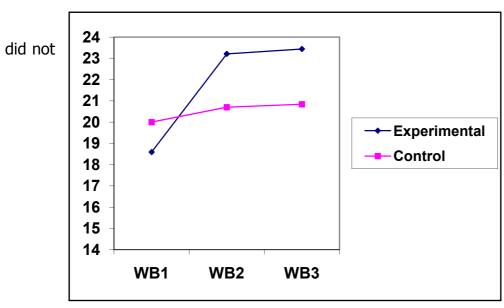
#### **Well-Being**

The well being (Life Satisfaction) data averaged across participants are presented in Table 2 with standard deviations.

	Experimental		Control	
	Mean	SD	Mean	SD
Time1	18.59	5.06	20.00	6.57
Time2	23.21	5.41	20.70	6.05
Time3	23.44	6.77	20.84	5.36

Table 2. Mean Well Being (Life Satisfaction) responses with standard deviations in the Experimental and Control conditions as a function of Time

Initially a descriptive statistics analysis was carried out in order to establish if the assumptions of the following analyses were met. This indicated that the distribution of the data in each condition was approximately normal, the standard deviations of each condition were approximately equivalent and there were no extreme scores. The data were then analysed with a 2x3 split-plot ANOVA with condition (experimental v control) and Time (Time1 v Time 2 v Time3) as factors. (Mauchly's test did not achieve significance so sphericity is assumed in the following reported tests). The main effect for condition did not achieve significance, but a significant main effect was found for Time (F(2,80) = 19.79, p<.001). A post-hoc analysis, with the criterion value for statistical significance set at .033 in order to control the familywise error rate, indicated that Time 1 differed significantly from Time 2 (t(81) = 4.67, p<.001) and from Time 3 (t(81) = 4.79, p<.001). The remaining



pairwise comparison achieve significance.

Figure 2. Graphical illustration of the significant interaction between Condition and Time.

This main effect, however, was modified by a significant interaction which was obtained between Condition and Time (F(2,80) = 10.25, p < .001). (See Figure 2 for graphical illustration). The mean well being scores for Time 1, Time 2 and Time 3 in

the control condition were 20.00, 20.70 and 20.84 respectively, whereas in the Experimental condition they were 18.59, 23.21 and 23.44 respectively. A simple effects analysis was carried out on the interaction data with the criterion value for significance set to .004 in order to control the familywise error rate. This revealed significant comparisons between Time 1 and Time 2 (F(1,39) = 34.80, p<.001) and Time 1 and Time 3 (F(1,39) = 33.82, p<.001) in the experimental group. No other comparisons achieved significance.

The results would appear to indicate therefore that whilst well being increased across time in the experimental group, no such beneficial effect was observed in the control group.

#### **Additional Analyses**

A moderation regression analysis was not carried out with regard to any effects resulting from trait optimism because an initial investigation using an independent t.test did not yield a significant result so the Null hypothesis (3) is accepted.

### **Qualitative**

As a follow up to the experimental groups' workshop an email was sent to all participants directly following the event. Participants were asked to comment on their experience and perception of the workshop via email. A second email was sent to participants asking for further comments six weeks after the workshop. This resulted in thirty four complete responses. A thematic analysis (Braun & Clarke 2006) was used to process the collated responses.

Four main themes were identified as participants' experience of the workshop and the interventions used; More Control, Shift in Perception, Well Being and Improve Self-esteem. Two themes emerged and two may have been prompted by the researcher's questions. Verbatim quotes that illustrate these themes are presented in italics.

#### Theme 1: More Control e.g. "I feel I have more control"

Many participants reported increased feelings of control with regard to both their feelings (emotions), perception and behaviour. There were three codes for this theme:

- 1. More direct control (semantic) "I feel much more in control and I'm now aware that I can really challenge/change my negative feelings."
- 2. Implied increased control (Latent) "I'm still not where I would like to be, but I feel that it is definitely less of a problem and, perhaps more importantly, that it is entirely within my power to change."
- 3. More choice "It showed me I have a choice about what that perception is. Once I've made the choice to perceive it differently I can now replace it with a different perception."

# Theme 2: Shift in Perception e.g. "My perception of my life and experiences has shifted"

Participants noticed changes in their perception of themselves, life issues and their ability to make changes. Only one person commented on not experiencing a change in perception. There were four codes for this theme:

- 1. Shift in perception (semantic) "Although I am basically quite happy with life my perception has been altered as I now know that I can tackle the areas which have been holding me back."
- 2. Implied shift in perception (latent) "Once I understood that negativity came from an outdated view it really helped me move those views to the file marked 'past and gone'."
- 3. No change in perception "life is just particularly hard going at the moment and the course could have changed my perception of that but it hasn't."
- 4. Reminded "life is good" "I left the workshop knowing that I have a life that I like, where there are choices to be taken and enjoyed not feared, and where I am happy."

# Theme 3: Well Being e.g. "I am more connect with feelings of well being and satisfaction with life"

This theme may have been prompted by one of the questions posed to participants; "How do you feel/think the workshop impacted on your satisfaction with life?" Participants reported how they felt their well being and satisfaction with life had improved. Living in the "now" and an increase in positive affect were also noted within this theme. Three codes were identified as representative of this theme:

- 1. Improvement in well being "Leading on from above response, the workshop gave me confidence and confirmation of my thought processes, therefore helping improve my satisfaction with life."
- 2. Living in the "Now" "I feel the workshop has served as a timely reminder that there are many things in my life which I should be proud of and take the opportunity to enjoy in the here and now."
- 3. Increase in positive feelings such as contentment, joy and calm "I spend less time worrying about what 'others' think as I feel more contented with just being me."

# Theme 4: Improve Self-esteem e.g. "I have noticed an improvement in my self-esteem."

As with the previous theme, this may have been prompted by one of the questions posed to the participants; "How do you feel/think the workshop has impacted on your self-esteem?" Participants reported increases in self-esteem in both direct and indirect ways. Increased confidence and a greater understanding of acceptance of self and others was also noted within this theme. Four codes were noted for this theme:

- 1. Improvement in self-esteem (semantic) "My self esteem has rocketed since spending the day with you. I feel far more confident in all avenues of my life. As I mentioned before, the main thing I took away with me that day was "I am good enough" and I say this often if I'm feeling a little wobbly."
- 2. Implied improvement in self-esteem (latent) "At the workshop the thoughts that spoke most to me were that each of us has value and worth, that

another person's opinion of us is subjective —not objective — and we don't have to 'own it', that changing ourselves changes the world around us, and that if we challenge our self-limiting beliefs and vision new outcomes we can create them."

- 3. Feeling more confident "The workshop exercises gave me the opportunity to focus on the key elements where I have obstacles and enabled me to release the key issues that affect this area the most. I already feel more confident that I will be able to appropriately join in discussions with senior managers and directors, that 'I am enough' and that I will let go of old emotions that no longer serve a purpose."
- 4. Feelings of acceptance "If there is something I do not know I no longer 'emotionally beat myself up' about it and feel that I am rubbish I just accept that I cannot know everything about everything. I am confident to be free to change my mind if something is taking too much time or effort and the means do not justify the end then I do not feel like I am giving up or a looser."

The qualitative aspect of this study appears to, in the main, support the quantitative data. The table below illustrates how closely participants' perception matched the quantitative results.

	Perceived	No	Perceived	Unsure of
	Improvement	Perceived	Decline	Impact
		Improvement		
Statistical	21	3	0	2
improvement				
Statistically	2	0	0	0
stable				
Statistical	0	0	1	0
decline				
Improved	3	2	0	0
with decline				
that remains				
above initial				
Improved	0	0	0	0
with decline				
Total no. of	26	5	1	2
participants				

**Table 3: Participant's perception compared to questionnaire results** 

### **Discussion**

The main purpose of this study was to expand the number of positive psychology interventions available that have empirical evidence of effectiveness and to introduce Neuro-linguistic programming as a source of such interventions. The results appear to support this purpose by providing what appears to be evidence that both self-esteem and well-being were improved by the NLP interventions used. This support is evident in the quantitative analysis with the thematic content analysis of the qualitative data providing rich examples from the participants' perspectives. For example;

"With regards to the impact on my self-esteem, the main thing I learnt from the workshop, apart from the techniques which were great, was that the technique /exercise doesn't always work on its own, and that it's important to look beyond it to plan strategies for coping with the situation. My self-esteem rose during the day and has continued to do so. The most important thing I took from the day was "I AM ENOUGH"."

"My well-being has also got considerably better especially since doing the timeline with you both."

Several participants reported a change in perception based on the phrase "I am enough". For example;

"This, along with the "I am good enough" saying, has made my Self-esteem rise not only in how I feel more confident outwardly, but also inwardly with regards to how I perceive myself, both my physical body and my personality. "

This utilises the underlying principle of NLP that people are whole and have all the resources they need (Koziey & McLeod 1987). This change in perception appears to promote a sense of self-acceptance and with it an ability to for participants to appreciate who they are without needing to change.

"I value what is good and constructive about me more, and this now gives me more of a sense of balance when I reflect on the things I wish I had done differently, or would like to change about myself. I am far more realistic about myself, and see myself as a more rounded and balanced person who in the main can have a positive rather than negative impact."

The results did not support the suggestion that trait optimism could predict who would respond positively to the interventions. It could be argued that the lack of evidence that levels of trait optimism have an influence on the change process (as far as self-esteem and well-being are concerned) could be viewed as positive. This

lack of influence means that change may be possible regardless of the level of optimism. Individuals may not be limited in their capacity for change. This offers a potential challenge to suggestions that traits determine the level of change possible as suggested by Sheldon & Lyubomirsky (2004).

There is also further support for the suggestion that self-esteem is a state that can be impacted upon. This supports other research into the nature of self-esteem (e.g. Crocker & Park 2004) and increases in self-esteem may provide individuals what may be a temporary boost in positive effect (Crocker, Karpinski et.al 2003 : Crocker et al., 2002, Lewis 1993: Mascolo & Fisher 1995: cited in Crocker & Park 2004). What this study has not addressed empirically are the ongoing issues around issues such as narcissism and "selfishness" (Baumeister et al 2003). NLP does however provide a mechanism that could safe guard against such issues. This mechanism is known as "ecology" and refers to the process of checking that changes are in the best interests not just of the individual but also others around them (Tosey & Mathison, 2003). Ecology is tested throughout NLP interventions to ensure that any changes are in the best interests of those involved.

The over reliance on self-report measures and lack of any objective way of testing self-esteem remains an issue (Baumeister et al 2003). The Rosenberg Scale is does demonstrate high reliability for test, re-test and so remains a useful tool until something more appropriate is developed (Baumeister et al 2003). From this perspective the author takes the stance that not only does this study provide empirical evidence that NLP improves self-esteem, improvement in self-esteem is to be desired.

Initially Fujita & Diener (2005) took the position that subjective well-being had a set point and was unlikely to be changed by interventions. Their own research caused them to review this position suggesting that perhaps there was a "soft baseline" for life satisfaction. The author suggests that the current study provides further support for this position and that subjective well-being can be impacted and that NLP seems to provide interventions that do just that.

Sheldon and Lyubomirsky (2004) commented on how important matching the type of intervention with the client could be for any real change to occur. This point has validity in this study also. One participant reported;

"I have no perception of any impact the workshop has had on my satisfaction with life."

The self-esteem and well-being scores were both 18 before the workshop. In both cases there was a decline after, 11 and 10 for self-esteem and 12 and 9 for well-being. While the life circumstances of this participant are unknown it could be speculated that this was one instance where the intervention was unsuitable and a different approach may have been more suitable.

While the evidence appears to support the suggestion that NLP does have a positive effect on both self-esteem and well-being caution must be exercised as a number of

design issues may also have played a part. For instance, Seligman et al (2005) suggest that the facilitator/coach could have a positive impact of results. While this is unhelpful from a research perspective utilizing this effect is actively pursued in NLP training (Overdurf & Silverthorn 1994). In a stance similar to the humanistic approach of "positive regard" NLP trainers are encouraged to "hold a positive internal representation" of their clients/participants (Overdurf & Silverthorn 1994). The author co-facilitated the workshops with an experienced co-trainer, both made a point of building a positive rapport with the group and held internal representations that all participants had the ability to change. This could be considered an integral part of all NLP interventions so if it did have an impact this was deliberate. It is possible however to argue that the changes were not tied to the facilitators style because improvement in self-esteem and well-being remained six weeks after the intervention. A second issue that may also have influenced the outcome was the researcher as facilitator factor. Participants may have felt pressure to provide positive feedback firstly due to receiving a free workshop and secondly because they knew the person collating the information was not only the facilitator but the researcher as well. Thirty four people responded to the qualitative aspect of the study in full. It could be speculated that some of the participants who did not choose to respond may have felt uncomfortable writing about negative perceptions of their experience for this reason. This could be addressed in future research by ensuring that facilitators are independent of the research and data collection.

To some extent this study was longitudinal as the final measure was taken six weeks after the intervention. It could be argued that this is a short a span of time and that any conclusions drawn would have to be done so with caution. Seligman et al (2005) also noted this concern even though their study stretched over six months.

The snowball sampling method resulted in an unrepresentative sample consisting mainly of white females. There were just five men in each condition and a lack of ethnic diversity. The unrepresentative nature of the sample therefore means any generalisations must be made with caution.

This sample was by nature self selecting which may also mean that expectations of change were high (Frank 1973 in Seligman et al 2005). The lack of a pre-workshop qualitative component makes this observation speculation only. This speculation can be further challenged by the lack of improvement in the control group. Both groups were given a preparation task consisting of a written exercise (see appendix 2). For the experimental group this task was intended as preparation for the workshop. The control group received this as a placebo task. Unlike the Seligman et al (2005) study the control group in this instance did not improve as well.

An additional influence may have been created by group experience effect. Several participants commented on the positive impact of being part of a large group of people with shared issues and agenda. For example;

"I still question whether this is because you're in a room full of people who share a similar level of self-esteem (or maybe lower than your own) and you feel better that others are in the 'same boat' – it helps to share your experience with others."

This participant improved from 18 on self-esteem to 20 directly after and sustained this increase. The increase in well-being was more dramatic starting at 15 and rising to 25 where it remained six weeks later. While the group effect may have had an impact it could be argued that the sustained improvement six weeks later is less likely to have resulted from this effect. A second group effect mentioned may also be relevant, for example;

"Having 2 children ages 2 and 4 and not going out to work means I get little time to concentrate on me and no time for reflection - so having had a day to concentrate on myself and to reflect was invaluable. What is difficult to determine is how much of the positive effect after Saturday is due to the content of the day and how much is due to just having had time to myself with no demands being made. If I were to guess I'd probably assign at least 70% to the content and 30% to time out"

This participant's self-esteem scored started at 10, increased to 20 straight after the workshop and then reduced to 17 six weeks later. Although the result dipped six weeks later this participant was still 7 points above the start point so it could be argued that the change was longer lasting.

A number of participants reported practicing the techniques used on the workshop. For example:

"My self esteem has improved and I feel better about myself since the workshop. I revisited some activities that I found helpful and useful when I started to slip back to the old me."

This had not been anticipated and it is unknown how many people continued to use the techniques and how much this impacted on the final results. A similar effect was noted by Seligman et al (2005). It is possible that the sustained results were at least in part affected by this practice effect.

Several learning points were noted from the qualitative aspect of the design. Firstly, the author did not request qualitative information from participants prior to the workshop. It is possible that useful information was lost as a result. For example, what were participants expectations, how committed to change were they and how did they currently perceive their self-esteem and well-being. This third point was answered retrospectively by some participants. The retrospective nature of these remarks may mean that they were coloured by more recent experience so may not have been as valid. Below are two examples;

"I did not feel that the workshop greatly impacted on my perception of my satisfaction with life. However, I was rather satisfied with my life when I arrived so there was little room for improvement during the day."

This participant started with a well-being score of 22 to which improved to 34 directly after the workshop and 30 six weeks later. This could suggest that retrospective reflection on well-being may not be accurate in all cases.

"I was pretty happy with my life before the workshop and I remain so afterwards."

By contrast this participant scored very highly on both scales before the workshop, 27 for self-esteem and 27 for well-being. The post scores remained high with self esteem remaining unchanged and well-being increasing to 31 and staying at 30 six weeks later. This participant seems to have been a little more objective however it could be argued that with such high scores changes may be less apparent to the individual anyway.

The second learning point from the qualitative data collection is linked to the inconsistent levels of content received. All information was collected by email and the level of detail provided was vast. The word count per participant ranged from 107 words to 1091 words in total. This could be improved on in future research in a number of ways. If the email method is used again a guide could be offered as to how many words per question are required. Alternatively the email collection process could be replaced with structured interviews instead. This would be more time consuming and might mean that fewer participants could be included.

A third learning point noted was the possible unhelpful influence to the questions used to gather information. Directly after the workshop participants were asked to answer the following questions:

- How do you feel/think the workshop has impacted on your self-esteem?
- How do you feel/think the workshop has impacted on your perception of your satisfaction with life?

Six weeks later the following question was presented:

What changes have you noticed in your self-esteem and well-being since the workshop?

The questions may have primed participants to focus on self-esteem and well-being when answering. As a result both self-esteem and well-being emerged as major themes. This focus may mean that useful information was lost. While improvement in self-esteem and well-being was the purpose of this study the priming effect may have hindered participants' expression.

A decision not to gather qualitative information from the control group was made. On reflection this decision may have been a missed opportunity to gather useful comparison comments.

Future research will need to address the design issues identified such as recruiting a more representative sample and extending the research over a longer time span. Without a longer time span confidence in the success of NLP interventions will need to remain cautious. A more structured and detailed method of collecting qualitative input will also need to be developed. To avoid possible bias or influence future workshops will need to be delivered by independent facilitators with the appropriate NLP skill level. Greater research into objective measures for both self-esteem and well-being will also be useful.

The desire participants demonstrated to continue practicing the techniques could also be included in future designs. For instance one condition could include regular practice while another explicitly asks participants not to practice the techniques.

The current workshop was one day in length, future research could examine individual interventions and/or longer workshops. For example NLP Practitioner training ranges from seven to twenty days in length. There are also many other interventions that were not included in the current study. Further investigation into these interventions is to be encouraged.

In conclusion, this study has provided tangible evidence that NLP interventions do have a positive impact on both self-esteem and well-being. The author proposes that NLP provides a wealth of interventions that have value in Positive Psychology. By expanding the field to include NLP Positive Psychology will be enriched. In short the purpose of this study has been met to expand the number of positive psychology interventions available that have empirical evidence of effectiveness. NLP does provide a useful addition to the field of Positive Psychology.

### **Bibliography**

- Ang, R. P., Neubronner, M., Oh, S. & Leong, V. (2006) Dimensionality of Rosenberg's Self-Esteem Scale among Normal-Technical Stream Students in Singapore, *Current Psychology*, 25(2), 120-131
- Bains, G., Anciano, D., Anderson, J., Bains, R., Encombe, J., Garner, C., Javitch, M., Kinley, N., Pelunsky, C., Robinson, R & Rowe, K. (2007) *Meaning Inc,* London: Profile Books
- Bandler, R. (1985) *Using your brain for a change*, Moab: Real People Press
- Bandler R. & Grinder, K. (1975) *Patterns of Hypnotic Techniques of Milton H. Erikson, M.D.* Cupertino: Meta Publications
- Bandler, R & Grinder, J. (1975) *The Structure of Magic Part I,* Palo Alto: Science and Behaviour Books Inc
- Bandler, R & Grinder, J. (1976) *The Structure of Magic Part II*, Palo Alto: Science and Behaviour Books Inc
- Bandler, R & Grinder, J. (1979) Frogs into princes, London: Eden Grove Publications
- Baumeister, R. F., Campbell, J. D., Krueger, J.I., & Vohs, K.D. (2003).`Does high self-esteem cause better performance, interpersonal success, or healthier lifestyles?' *Psychological Science in the Public Interest*, 4 (1), 1-44
- Bell, E. & Byman, A. (2007) The Ethics of Management Research: An Exploratory Content Analysis, *British Journal of Management*, 18, 63-77
- Biswas-Diener, R. & Dean, B. (2007) *Positive Psychology Coaching*, New Jersey: John Wiley & Sons Inc
- Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3, 77-101
- Bryman, A. (2001) Social Research Methods, Oxford: Oxford University Press
- Bryman, A. (2006a) Integrating quantitative and qualitative research: How is it done? *Qualitative Research* 6(1), 97-113
- Bryman, A. (2006b) Paradigm Peace and the Implications for Quality, *International Journal Social Research Methodology*, 9(2), 111-126
- Burke, K.L., Joyner, A. B., Czech, D. R. & Wilson, M. J. (2000) An Investigation of Concurrent Validity between two Optimism/Pessimism Questionnaires: The Life Orentation Test-Revised and the Optimism/Pessimism Scale, *Current Psychology*, 19(2), 129-136
- Cameron-Bandler, L. (1985) Solutions, Moab: Real People Press
- Carver, C.S. & Scheier, M. (2003) Optimism. In Lopez, S. J. & Snyder, C. R. (Eds). *Positive Psychological Assessment* (4<sup>th</sup> ed, pp. 219-233). Washington, DC: American Psychological Association

- Crandell J.S. (1989) Brief treatment of adult children of alcoholics: Accessing resources for self-care Psychotherapy, 26(4), 510-513
- Crocker, J., Karpinski, A. Quinn, D.M., & Chase, S.K. (2003) When Grades Determine Self-Worth: Consequences of Contingent Self-Worth for Male and Female Engineering and Psychology Majors'. *Journal of Personality and Social Psychology*, 85, 507-516
- Crocker, J. & Park, L.E. (2004) 'The Costly Pursuit of Self-Esteem' *Psychological Bulletin*, 130 (3), 392-414
- Crocker, J., & Wolfe, C.T. (2001), `Contingencies of self-worth'. *Psychological Review*, 108 (3), pp 593-623
- Diamantopoulos, G., Woolley, S. & Spann, M. (2008) *A critical review of past Research into the NLP Eye-accessing cues model*, First International Neuro-Linguistic Programming Conference, Surrey, July 2008
- Diener, E., Emmons, R.A., Larsen, R.J. & Griffin, S. (1985) The Satisfaction with Life Scale, *Journal of Personality Assessment*, 49, 71-75
- Diener, E. (2000) Subjective Well-Being, The science of happiness and a proposal for a national index, *American Psychologist* 55(1), 34-43
- Dilts, R. B. & DeLozier, J.A. (2000) *Encyclopaedia of Systemic Neuro-Linguistic Programming and NLP New Code*, Scotts Valley, CA: NLP University Press
- Einspruch, E.L. & Forman, B.D. (1985) Observations concerning research literature on neuro-linguistic programming, *Journal of Counselling Psychotherapy* 32(4), 589-596
- Elich, M., Thompson, R.W. and Miller L. (1985) Mental Imagery as revealed by eye movements and spoken predicates: A test of Neurolinguistic Programming Journal of Counselling Psychology, 32(4), 622-625
- Fujita, F. & Diener, E. (2005) Life Satisfaction Set Point: Stability and Change, *Journal of Personality and Social Psychology*, 88(1), 158-164
- Gordon, D. (1978) *Therapeutic Metaphors*, Cupertino: Meta Publications
- Heap, M. & Aravind, K. (2002) *Medical and Dental Hypnosis*, London: Churchill Livingstone
- Heatherton, T. F. & Wyland, C. L. (2003) Assessing Self-Esteem. In Lopez, S. J. & Snyder, C. R. (Eds). *Positive Psychological Assessment* (4<sup>th</sup> ed, 219-233). Washington, DC: American Psychological Association
- Iacoboni, M. (2008) *Mirroring People*, New York: Farrar, Straus & Giroux
- Ishihara, M., Keller, P.E., Rossetti, Y. & Prinz, W. (2008) Horizontal spatial representations of time: evidence for the STEARC effect, *Cortex, Special Issue: Numbers, space and action*, 44 (4), 454-461
- James, T. & Woodsmall, W. (1988) *Time Line Therapy and the Basis of Personality*, Capitola: Meta Publications

- Koziey, P.W. and McLeod, G.L. (1987) Visual-Kinaesthetic Dissociation in treatment of victims of rape Professional, Psychology, Research and Practice, 18(3), 276-282
- Mruk, C. (1999), Self-Esteem 2<sup>nd</sup> ed. New York: Springer.
- Overdurf J. & Silverthorn J. (1994) *Training Trances* Portland: Metamorphosis Press
- Overdurf J. & Silverthorn J. (2000) *Time-based Techniques* (audio book), Lancaster: Neuro-energentics
- Pavot, W. & Diener, E. (1993) Review of the Satisfaction With Life Scale, *Psychological Assessment*, 5 (2), 164-172
- Peltier, B. (2001) The Psychology of Executive Coaching, Abingdon: Routledge
- Pyszcynski, T., & Cox, C. (2004), `Can we really do without self-esteem? Comment of Crocker and Park (2004)', (2004), *Psychological Bulletin*, 130 (3), 425-429
- Rogers, C.R. (1951) Client Centred Therapy London: Constable
- Rosenthal R. & Jacobson L. (1992) *Pygmalion in the classroom* Norwalk: Crown House Publishing
- Scheier, M.F. & Carver, C.S. (1985) Optimism, Coping and Health: Assessment and implications of generalised outcome expectancies, *Health Psychology*, 4, 219-247
- Scheier, M.F., Carver, C.S. & Bridges, M.W. (1994) Distinguishing optimism from neuroticism (and trait-anxiety, self-mastery and self-esteem): A re-evaluation of the Life Orentation Test, *Journal of Personality and Social Psychology*, 67, 1063-1078
- Seligman, M. (1998) *Learned Optimism: How to change your mind and your life*, New York: Free Press
- Seligman, M.E.P., Steen, T.A., Park, N. & Peterson, C (2005) Positive Psychological Progress: Empirical Validation of Interventions, *American Psychologist*, 60(5), 410-421
- Sharpley, C.F. (1984) Predicate matching in NLP: A review of research on the preferred representational system, Journal of Counselling Psychology, 31(2), 236-248
- Sheldon, K. M. & Lyubomirsky, S (2004) Achieving Sustainable New Happiness:
  Prospects, Practices and Prescriptions. In Linley P.A. & Joseph, S. (Eds),
  Positive Psychology in Practice (127-145), New Jersey: John Wiley & Sons Inc
- Tosey, P. & Mathison, J. (2003) Neuro-linguistic programming and learning theory: a response *The Curriculum Journal* 14 (3), 371-388
- Wood, J. A. (2006) NLP Revisited: Non-verbal communication and signals of trustworthiness Journal of Selling and Sales Management

# **Appendix**

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### **Appendix I**

# Pilot Study – Does NLP have a positive impact on self-esteem, self-efficacy, locus of control or optimism?

I had the opportunity to work with a group to test out the hypotheses that NLP has an impact on factors such as self-esteem, self-efficacy, optimism and locus of control. The null hypotheses would mean there is no impact caused by the intervention.

The sample used for this small study were all self-selected participants on an NLP Practitioner programme. Their purpose in attending was twofold, personal development and to learn some techniques they could use to help other people. The programme was an intensive course of nine consecutive days. I have included an outline in the appendix to provide an overview of the topics covered. The final day of the programme includes an assessment of practical skills.

Each person completed four questionnaires on day one and then repeated the same questionnaires on the ninth day. The first was administered before teaching began and the final one on completion of input but before assessment.

I recruited a second group attending a "non-NLP" corporate training programme who completed the same questionnaires over the same time span to provide a control group. Both groups had similar backgrounds, gender, age and ethnicity.

The four measures used were the Generalised Self-Efficacy Scale (Schwarzer & Jerusalem 1995); Life Orientation Test-Revised (LOT-R) (Scheier, Carver & Bridges 1994); Rosenberg Self-Esteem Scale; and Brief Rotter's Locus of Control Scale (Lumpkin 1985).

The first questionnaire completed was the Generalised Self-Efficacy Scale (GSE) (Schwarzer & Jerusalem 1995). This is a ten item scale using a four point Likert scale ranging from (1) not true at all to (4) Exactly true.

A number of studies reviewed by Luszczynska et al (2005) have reported high reliability, stability and construct validity for the GSE scale. There is also supporting evidence that only one global dimension is being measured and it has been found to be configurally equivalent across twenty eight nations. In a review of literature Chen et al (2001) report that GSE has strong relationships with other constructs including self-esteem, locus of control and neuroticism. There have been challenges as to whether GSE is a construct distinct from self-esteem (Chen et al 2001).

The Life Orientation Test-Revised (Scheier, Carver & Bridges 1994) was developed to replace the earlier version (Scheier & Carver 1985). It has good internal consistency and is considered stable over time. One of the issues with the earlier version seems to have been overcome now that the positive and negative subsets have a better relationship. There is a continuous distribution of scores with only slight skewing towards optimistic (Carver and Scheier 2003). There is a possibility that the LOT-R is measuring two distinct dimensions, there are some biological explanations offered for this (Watson and Tellegen 1985 in Carver and Scheier 2003) that there is not space to explore further here. The LOT-R may be more a measure of trait than state optimism and pessimism (Burke et al 2000) so may not change over the course of this study.

The questionnaire itself has six coded items of which three are coded for optimism and three for pessimism and there are four filler items. The scoring uses a five point Likert scale ranging from strongly disagree to strongly agree.

The third scale used, the Rosenberg Self-Esteem Scale (Rosenberg 1965) is the most widely used measure for global self-esteem and it has high internal reliability (alpha 0.92) (Heatherton & Wyland 2003). It has been criticised because it may be measuring two separate factors, positive and negative (Carmines & Zeller 1974 in Heatherton & Wyland 2003). This has been countered with suggestions that wording of items may have caused this effect as both factors correlated very closely with a criterion variable in direction, consistency and strength suggesting that they are associated with the same general construct (Rosenberg 1979 in Heatherton & Wyland 2003). There is some evidence to suggest that a significant relationship exists between positive self-esteem and academic self-efficacy (Ang et al 2006). The ten item scale contains five positively worded and five negatively worded items. A four point Likert scale is used ranging from 3 (strongly agree) to 0 (strongly disagree). Typical scores are around 22 with most people scoring between 15-25 (Heatherton & Wyland 2003).

The final scale used in this study was the Brief Rotter's Locus of Control Scale (Lumpkin 1985). It is a six item test with three items measuring internal and three measuring external locus of control. A five point Likert Scale is used ranging from (1) strongly disagree to (5) strongly agree. A significant relationship has been reported between locus of control and GSE, for example people with an internal locus of control will attribute past successes to themselves and this in turn seems to boost GSE (Stanley & Murphy 1997). This relationship will not be explored in this study due to time constraints.

The raw data provided what appeared to be differences between the control and experimental groups and is shown in figure 1. The mean score of the repeated experimental group for self-efficacy was 35.5 (standard deviation 4.67) while the repeated measure mean for the control group was 30.2 (standard deviation 2.61. The experimental group had an increase of 7.1 while the difference for the control group was just 0.9. This seems to suggest that the NLP intervention had an impact on self-efficacy. As would be expected the raw data for self-esteem shows a similar pattern (experimental group increase between measures of 5.3 compared to 0.7 for the control group). There was also some suggestion of impact from the LOT-R scores with the experimental group mean increasing by 3.2 compared to just 1 on the control group. The raw scores for Locus of Control do not appear to indicate general impact.

					Ex	cperi	imenta	al Grou	ıp						
Subject	Self	-efficad	СУ	l	_OT-R		Self	f-estee	m		Loc	cus of	f Contro	ol	
										ıI	nternal		External		
	1 2 3 1 2 3						1	2	3	1	2	3	1	2	3
1	30	33		27	24		22	26		11	9		7	8	
2	34	40		24	30		27	30		10	13		6	5	
3	30	40		26	29		22	30		11	15		3	8	
4	29	36		18	27		23	30		15	11		3	11	
5	25	31		18	19		10	11		11	10		11	11	
6	29	38	36	22	25	24	13	29	22	10	13	12	10	7	6
7	33	40		29	30		21	29		12	14		7	4	
8	31	38	35	20	26	21	29	28	30	11	10	12	8	8	9
9	26	26		19	16		10	8		11	12		7	9	
10	17	33	32	19	28	20	11	20	20	10	13	9	12	6	11
Mean	28.4	35.5		22.2	25.4		18.8	24.1		11.2	12		7.4	7.7	
Sd dev	4.86	4.67		4.05	4.67		7.18	8.29		1.48	1.94		3.03	2.31	

Figure 1a: Raw data from experimental group.

	Control Group														
Subject	Self	f-efficad	СУ	L	OT-R		Self	f-estee	m		Loc	cus of	Contro	ol	
										Ir	nternal		E	xternal	
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1	33	35		21	21		25	23		12	12		7	6	
2	33	33		24	23		22	24		11	8		9	6	
3	32	31		19	21		20	25		7	10		9	6	
4	29	29		18	19		15	14		9	11		10	9	
5	29	32		19	19		21	26		11	13		7	6	
6	26	29		17	20		20	18		10	11		11	11	
7	26	26		18	22		17	18		11	11		9	9	
8	28	28		18	18		16	15		11	11		10	10	
9	28	29		18	17		20	21		12	11		6	5	
10	29	30		15	17		25	24		13	8		10	4	
Mean	29.3	30.2		18.7	19.7		20.1	20.8		10.7	10.6		8.8	7.2	
St d	2.58	2.61		2.41	2.06		3.41	4.29		1.70	1.58		1.62	2.35	

Figure 1b: Raw data from experimental and control groups.

The test chosen for this investigation was a paired t-test with the same subjects across time with an intervention in between for the experiment group. Degree of freedom is n-1.

Null Hypotheses: there will be no difference between the two observations.

Hypotheses: there will be a difference between the two observations.

If the p-value associated with t is low (<0.05), there will be evidence to reject the null hypotheses and evidence would exist for the hypotheses. In this investigation four different measures are being tested against the above Null Hypotheses and Hypotheses.

#### **Results: Self-efficacy**

Paired Samples Test

				Paired Differenc	es		t	df	Sig. (2-
		Mean	Std. Deviation			tailed)			
Lower									
Upper									
Pair 1									
VAR00001 - VAR00002	-7.1000	4.22821	1.33708	-10.1247	-4.0753	-5.310	9	.000	
Pair 2									
VAR00003 - VAR00004	9000	1.37032	37032 .43333 -1.8803 .0803 -2.077					.068	

Figure 2: t-test results on scores relating to self-efficacy.

The t value for the experimental group is -4.0753 with 9 dfs and the significance is listed as 0.000. SPSS only displays 3 decimal places for significance so this means that the p is at least less than 0.05. Therefore there is a significant difference between the repeated measures for the experimental group but not for the control group.

There were only three responses for the 2<sup>nd</sup> repeated measure.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1					
VAR00001	25.6667	3	7.57188	4.37163	
VAR00002	34.3333	3	2.08167	1.20185	

Figure 3: Descriptive statistics for the 2<sup>nd</sup> repeated measure of self-efficacy (experimental group).

Paired Samples Test

			Pai	red Difference	es		t	df	Sig. (2-
		Mean	Std. Deviation	Deviation Std. Error 95% Confidence Interva					tailed)
Lower									
Upper									
Pair 1									
VAR00001 - VAR00002	-8.6667	5.68624	3.28295	-22.7921	5.4587	-2.640	2	.119	

Figure 4: t-test results of 2<sup>nd</sup> repeated measure for self-efficacy (experimental group).

With the smaller sample the results were not significant however the raw data still shows interesting differences. I will endeavour to collect data from the other seven participants as this may still produce a significant result.

#### **Results: LOT-R**

Paired Samples Test

			F	Paired Differe	nces		t	df	Sig. (2-
		Mean	Std. Deviation	Std. Error Mean		ence Interval Difference			tailed)
Lower									
Upper									
Pair 1									
VAR00001 - VAR00002	-3.2000	4.34102	1.37275	-6.3054	0946	-2.331	9	.045	
Pair 2									
VAR00003 - VAR00004	-1.0000	1.69967	.53748	-2.2159	.2159	-1.861	9	.096	

Figure 5: t-test results on scores relating to LOT-R

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1					
VAR00003	20.3333	3	1.52753	.88192	
VAR00004	21.6667	3	2.08167	1.20185	

Figure 6: Descriptive statistics for the 2<sup>nd</sup> repeated measure of LOT-R (exp group).

			Pai	ired Difference	S		t	df	Sig. (2-
	Mean		Std. Deviation	Std. Error Mean		95% Confidence Interval of the Difference			tailed)
Lower									
Upper									
Pair 1									
VAR00003 - VAR00004	-1.3333	.57735	.33333	-2.7676	.1009	-4.000	2	.057	

Figure 7: t-test results of 2<sup>nd</sup> repeated measure for LOT-R (experimental group).

The results for this test were not significant supporting the suggestion that optimism and pessimism may be a trait (Burke et al 2000).

#### **Results: Self Esteem**

Paired Samples Test

			Pai	red Differenc	es		t	df	Sig. (2-
		Mean	Std. Deviation		95% Confid Interval of t Difference				tailed)
Lower									
Upper									
Pair 1									
VAR00001 - VAR00002	-5.3000	5.41705	1.71302	-9.1751	-1.4249	-3.094	9	.013	
Pair 2									
VAR00003 - VAR00004	7000	2.62679	.83066	-2.5791	1.1791	843	9	.421	

Figure 8: t-test results on scores relating to Self-esteem

The t value for the experimental group was -3.094 with 9 dfs and the significance was listed as 0.013. The p score was 0.013 which is less than 0.05. Therefore there is a significant difference between the repeated measures for the experimental group but not for the control group.

Paired Samples Statistics

		Mean	N	Std.	Std. Error
				Deviation	Mean
Pair 1					
VAR00005	17.6667	3	9.86577	5.69600	
VAR00006	24.0000	3	5.29150	3.05505	

Figure 9: Descriptive statistics for the 2<sup>nd</sup> repeated measure of self-esteem (experimental group).

Paired Samp	les Test		Paired	Differences			t	df	Sig. (2-
		Mean	Std. Deviation	Std. Error Mean		95% Confidence Interval of the Difference			tailed)
Lower									
Upper									
Pair 1									
VAR00005 - VAR00006	-6.3333	4.61880	2.66667	-17.8071	5.1404	-2.375	2	.141	

Figure 10: t-test results of 2<sup>nd</sup> repeated measure for self-esteem (experimental group).

As with the results for self-efficacy the small sample size may explain why the 2<sup>nd</sup> repeated measure is not significant.

#### **Results:Locus of Control**

Paired Samples Test				Paired Dit	fferences		t	df	Sig. (2-
		Mean	Std. Deviation	Std. Error Mean		nce Interval of ference			tailed)
Lower									
Upper									
Pair 1									
VAR00001 - VAR00002	8000	2.65832	.84063	-2.7016	1.1016	952	9	.366	
Pair 2	VAR00003 - VAR00004		4.05654	1.28279	-3.2019	2.6019	234	9	.820
Pair 3	VAR00005 - VAR00006		2.42441	.76667	-1.6343	1.8343	.130	9	.899
Pair 4	VAR00007 - VAR00008		1.89737	.60000	.2427	2.9573	2.667	9	.026

Figure 10: t-test results on scores relating to Locus of Control

#### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1					
VAR00007	10.3333	3	.57735	.33333	
VAR00008	11.0000	3	1.73205	1.00000	
Pair 2					
VAR00009	10.0000	3	2.00000	1.15470	
VAR00010	8.6667	3	2.51661	1.45297	

Figure 11: Descriptive statistics for the 2<sup>nd</sup> repeated measure of locus of control (experimental group).

Paired Samples Test		Paired Differences				t	df	Sig. (2-	
		Mean	Std. Deviation	Std. Error Mean	95% Confide of the Differe				tailed)
Lower									
Upper									
Pair 1									
VAR00007 - VAR00008	6667	1.52753	.88192	-4.4612	3.1279	756	2	.529	
Pair 2									
VAR00009 - VAR00010	1.3333	2.51661	1.45297	-4.9183	7.5849	.918	2	.456	

Figure 4: t-test results of 2<sup>nd</sup> repeated measure for locus of control (experimental group).

The results were not significant for locus of control.

#### **Discussion**

The results of this study provide some evidence that further research is necessary into the effectiveness of NLP as a positive psychology intervention. Changes in both self-esteem and self-efficacy suggest that the interventions used did allow people to experience positive change in the short term. Longer term changes may have occurred however further measurement is required.

A number of factors may have influenced the outcome of this study in addition to the NLP interventions. The sample size was small (10) and self-selecting so may not have been representative. There may well have been similar issues to Seligman et al's (2005) study with regard to this self-selection. Participants will also have experienced a high level of social support which may also have impacted on the results (Sheldon & Lyubomirsky 2004) add to this the role of the facilitators (Seligman et al 2005) and another confounding variable has been identified. In other words change may have been influenced by the style and rapport building skills of the trainers rather than specific interventions. This may have been intensified by the feeling of acceptance within the group which on its own may have promoted increased feelings of self-esteem. On reflection the timing of the first repeated measures may have had a negative impact on results. Participants were asked to complete the second set of measures while waiting to take the assessment. Many people experience anxiety while waiting for tests so some or all of the participants may have been affected. The choice of questionnaires was largely convenience, it may be that there are more appropriate measures that could be used in future research.

The nature of the nine day workshop makes it difficult to identify specifically what caused differences on the repeated measures. For example, it is possible that any changes measured may have been due to one particular activity or intervention. Alternatively there could be a cumulative effect. Future work is needed to design a framework of interventions

that can be measured more objectively. Other designs may involve testing each intervention in isolation.

The control group selection was not ideal as I had also been involved in training them in a management development programme. A more suitable group would have been people not involved in any type of intervention.

NLP has attracted extreme criticism by many people in academic circles which seems strange when many of it's original ideas are based on the work of others who are respected. The scope of this paper does not allow a thorough literature review of the background and foundation of these interventions. At this stage I will confine myself to a brief outline of the more obvious links.

NLP borrows from many other disciplines in constructing it's own frame work of interventions. The earliest work in NLP was based on modelling the work of people such as Fritz Perls, Virginia Satir, Milton Erikson and Gregory Bateson. The work of Satir and Erikson produced the two major language patterns that underpin NLP, the Meta model and Milton model respectively (Bandler & Grinder 1975,1976). Some of the techniques developed in conjunction with this are detailed in Peltier (2001) such as indirect suggestion, the use of ambiguity, specific language and reframing. He also mentions modelling, use of imagery, story telling and metaphor all key interventions in NLP. Peltier (2001) points to these as creative, useful "non-linear" techniques that can help clients to shift but cautions that some are manipulative. NLP has a whole philosophy underpinning it's use that encourages practitioners to behave ethically some of this is mapped out in the presuppositions of NLP that can be traced back to Watzlawick et al (1967, 1974 in Peltier 2001). A copy of these pre-suppositions can be found in the appendix together with an example of the code of ethics used by many practitioners. Further work is needed to explore the value NLP brings to positive psychology.

#### References

- Ang, R. P., Neubronner, M., Oh, S. & Leong, V. (2006) Dimensionality of Rosenberg's Self-Esteem Scale among Normal-Technical Stream Students in Singapore, *Current Psychology*, 25(2), 120-131
- Bandler, R & Grinder, J. (1975) *The Structure of Magic Part I* Palo Alto: Science and Behaviour Books Inc
- Bandler, R & Grinder, J. (1976) *The Structure of Magic Part II* Palo Alto: Science and Behaviour Books Inc
- Biswas-Diener, R. & Dean, B. (2007) *Positive Psychology Coaching*, New Jersey: John Wiley & Sons Inc
- Burke, K.L., Joyner, A. B., Czech, D. R. & Wilson, M. J. (2000) An Investigation of Concurrent Validity between two Optimism/Pessimism Questionnaires: The Life Orentation Test-Revised and the Optimism/Pessimism Scale, *Current Psychology*, 19(2), 129-136
- Carver, C.S. & Scheier, M. (2003) Optimism. In Lopez, S. J. & Snyder, C. R. (Eds). *Positive Psychological Assessment* (4<sup>th</sup> ed, pp. 219-233). Washington, DC: American Psychological Association

- Chen, G., Gully, S. M. & Eden, D. (2001) Validation of a New General Self-Efficacy Scale, *Organizational Research Methods*, 4(1), 62-84
- Cooligan, H. (1999 ed) *Research Methods and Statistics in Psychology*, Tyne & Wear: Hodder and Stoughton
- Heatherton, T. F. & Wyland, C. L. (2003) Assessing Self-Esteem. In Lopez, S. J. & Snyder, C. R. (Eds). *Positive Psychological Assessment* (4<sup>th</sup> ed, pp. 219-233). Washington, DC: American Psychological Association
- Kinear, P. R. & Gray, C. D. (2000) SPSS for Windows made simple Release 10 Hove: Pyschology Press
- Luszczynska, A., Scholz, U. & Schwarzer, R. (2005) The General Self-Efficacy Scale: Multicultural Validation Studies, *The Journal of Psychology*, 139(5), 439-457
- Peltier, B. (2001) The Psychology of Executive Coaching, Abingdon: Routledge
- Saunders, M., Lewis, P. & Thornhill, A. (2007 ed) *Research Methods for Business Students*, Harlow: Prentice Hall
- Stanley, K.D. & Murphy, M.R. (1997) A Comparison of General Self-Efficacy with Self-Esteem, *Genetic, Social and General Psychology Monographs*, 123(1), 79-99

## **Appendix II**

## **Consent and Registration forms**

### **Consent, Ethics & Registration Forms**

#### **UNIVERSITY OF EAST LONDON**

Docklands Campus, University Way, London E16 2RD

#### **University Research Ethics Committee**

If you have any queries regarding the conduct of the programme in which you are being asked to participate please contact the Secretary of the University Research Ethics Committee: Ms D Dada, Administrative Officer for Research, Graduate School, University of East London, Docklands Campus. London E16 2RD (telephone 0208 223 2976 e-mail d.dada@uel.ac.uk)

#### The Principal Investigator

Melody Cheal 41a Bedford Road, Moggerhanger, Beds, MK44 3RQ (01767) 640956 or 07721 033507

#### **Consent to Participate in a Research Study**

The purpose of this letter is to provide you with the information that you need to consider in deciding whether to participate in this study.

#### **Project Title**

An investigation into how Neuro Linguistic Programming can be added to Positive Psychology as a source of interventions to increase self-esteem and subjective well-being in psychologically healthy populations.

#### **Project Description**

The aims of this project are to provide participants with a one day workshop of Neuro Linguistic Programming interventions designed to increase self-esteem and well being.

In order to take part in this project you will need to satisfy two criteria. As part of this criteria you will need to declare that you are not currently taking medication for depression or for any psychological disorder, or undertaking treatment with a therapist. The second criteria is that you are interested in improving your self-esteem and well being by taking part in the workshop interventions. As part of the study you will be asked to complete a series of questionnaires (see attached). The questionnaires will be repeated three times. If you are part of the experimental group you will complete the form just before the workshop, just after and then six weeks later. You will also be asked to write a short note on your experience (about half a side of A4 paper) just after and then again six weeks after the workshop. If you are part of the control group you will be asked to complete the same questionnaires over the same time span. You will attend the workshop once the study has been completed (about two months after the first questionnaire).

The intention of the study is that you should have a greater sense of well being and higher self-esteem as a result of taking part in the workshop. In the unlikely event that you feel the need for further support after the workshop a list of appropriately qualified practitioners will be provided on request.

#### **Confidentiality of the Data**

All personal data provided by participants will be stored in accordance with data protection legislation. Paper copies will be kept in a locked filing cabinet in a secure location. Computer data will be stored in files that are password protected. The project will present results in such a way that participants identity will remain anonomous. At the conclusion of the study personal data will be destroyed.

#### Location

The workshop will be held in a conference centre (to be confirmed) in the Bedford area.

#### Disclaimer

You are not obliged to take part in this study, and are free to withdraw at any time during the tests. Should you choose to withdraw from the programme you may do so without disadvantage to yourself and without any obligation to give a reason.

If you have understood this document and the criteria for taking part, please sign and date this form below. In accordance with the University's ethics code your signature will mean that you have given informed consent to take part in this study.

Name (please print)	Signature
Date	

### **Registration Form**

<b>Full name</b> Please <u>underline</u> surname	
Address (including postcode)	
Email	
Daytime telephone	Evening telephone
Gender Date of Birth	
Disabled/Non-disabled (delete as approp	oriate)
<b>Ethnic Origin</b> (delete as appropriate) Whit Black Groups/Indian/Pakistani/Bangladeshi/	e/Black Caribbean/Black African/Black Other Chinese/Other

#### **Data Protection Notice**

We are required to comply with the provisions of the Data Protection Act 1998 (the "Act") in relation to how we handle any personal data which we obtain from you. Any personal information gathered will only be used in the context of the research study we conduct with you. We may also collect Sensitive Personal Data relating to you but only with your explicit consent in advance. In disclosing your personal details to us, you agree that we may process your Personal Data in this context only without explicit permission from you.

❖ You have the right to require us to correct any inadequacies in the personal details we hold about you and to object to any direct marketing which we carry out using your personal details. You also have the right to ask for a copy of the information held by us in our records in return for payment of a small fee which will not exceed £10. Please contact us on 01767 640956 if you wish to obtain a copy of the personal data which we hold in relation to you

## **Appendix III**

# **Self Report Questionnaires**

### **Rosenberg Self-Esteem Scale (Rosenberg 1965)**

	Rosenberg Self-Esteem Scale						
	3	2	1	(	)		
S	trongly Agree	Agree	Disagree	Strongly	Disagree		
1	I feel that I am a person of worth, at least on an equal plane with others.						
2	I feel that I have	e a number of good q	ualities.				
3	3 All in all, I am inclined to feel that I am a failure.						
4	4 I am able to do things as well as most people.						
5	5 I feel I do not have much to be proud of.						
6	6 I take a positive attitude toward myself.						
7	7 On the whole, I am satisfied with myself.						
8	8 I wish I could have more respect for myself.						
9	9 I certainly feel useless at times.						
10	10 At times I think that I am no good at all.						

For the items with an (R) (3, 5, 8,9,10) reverse the scoring. For those items without an (R) next to them, simply add the score. Add the scores. Typical scores on the Rosenberg scale are around 22, with most people scoring between 15 and 25.

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### The Satisfaction with Life Scale (Pavot & Diener 1993).

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 Strongly agree
- 6 Agree
- 5 Slightly agree
- 4 Neither agree nor disagree
- 3 Slightly disagree
- 2 Disagree
- 1 Strongly disagree

In most ways my life is close to my ideal.
The conditions of my life are excellent.
 I am satisfied with my life.
So far I have gotten the important things I want in life.
If I could live my life over, I would change almost nothing.

- 31 35 Extremely satisfied
- 26 30 Satisfied
- 21 25 Slightly satisfied
- 20 Neutral
- 15 19 Slightly dissatisfied
- 10 14 Dissatisfied
- 5 9 Extremely dissatisfied

АІ	Life Orientation Test-Revised (LOT-R) A Measure of Generalised Optimism versus Pessimism				
	Strongly Agree 5 4 3 2 1 Strongly Disagree				
1	In uncertain times, I usually expect the best.				
2	It's easy for me to relax.				
3	If something can go wrong for me it will.				
4	I'm always optimistic about my future.				
5	I enjoy my friends a lot.				
6	It's important for me to keep busy.				
7	I hardly ever expect things to go my way.				
8	I don't get upset too easily.				
9	9 I rarely count on good things happening to me.				
10	Overall, I expect more good things to happen to me than bad.				

Respondents indicate the extent of their agreement with each item using a 5 point Likert scale ranging from "strongly disagree" to "strongly agree". After reverse coding the negatively worded items (3, 7 & 9), the six nonfiller items are summed to produce an overall score. (Filler items 2, 5,6 & 8). From Scheier, Carver & Bridges (1994). © 1994 by the American Psychological Association.

### **Appendix IV**

#### **Pre-workshop task**

In preparation for the work shop spending some time considering the following questions. This will help you decide what to focus on during the workshop. Please feel free to write as much or as little as you need to help make the changes you have in mind.

#### 1. Section One

- a. In what areas of your life would you like to feel more confident? e.g. in relationships, at work, driving, etc.
- b. How will this confidence change your life for the better?
- c. How would you like to feel different?
- d. How will you know you have changed?
- e. What limitations have you placed on your life up until now?
  - e.g. I avoid social situations.
- f. How do you know this is a problem?
- g. What did you get from keeping this limitation in the past?
  - e.g. By avoiding social situations I keep myself safe from rejection.
- h. What have you believed about yourself that has limited you?
  - e.g. I am not creative, attractive, thin enough, clever etc
- i. How do you know this is a problem?
- j. What do you get out of this limiting belief?
  - e.g. by believing I am not clever enough I did not have to try
- k. How do you want to be different?
- I. How will your life have changed?

#### 2. Section Two

- a. What are you already confident about in your life?
  - e.g. I am confident in meetings?
- b. How does that make you feel?
- c. Where are you at your most confident?
  - e.g. playing golf
- d. What makes you feel confident at these times?
  - e.g. I always do well when I play.
- e. What are your positive self beliefs?
  - e.g. I am friendly and helpful.
- f. What makes you happy?

#### 3. Section Three

- a. What would you like to achieve in the next five years?
- b. What will you miss out on if you don't achieve your goals?
- c. What will it mean when you to achieve your goals?

# **Appendix V**

## **Thematic table**

Theme : Mo	re Control			
Code	More control (semantic)			
Participant	Quote			
No.				
3	I think the exercises are relatively simple to apply and that in itself gives you confidence that you can take control of the issues.			
5	More in control and always reflecting the long term implications.			
8	this time I seemed to be more in control of my own feelings to a point that the behaviour didn't cause me anywhere as much grief as it used to.			
12	I feel that I can be more in control of certain behaviour patterns and change my approach for the better			
24	Initially I felt like I'd been recreated as I would like to be - in control of myself, my home life, even my anxiety problems.			
26	I feel much more in control and I'm now aware that I can really challenge/change my negative feelings.			
31	I feel like I have taken more control of my life instead of being dicatated too.			
31	I want to continue to feel this way and take further control and ensure that I don't lose my confidence again.			
34	I have more control over how I am feeling			

Theme: Mor	re Control		
Code	Implied increase in control (latent)		
Participant No.			
1	I have always felt that we are in control of our own destiny and that if you want to do something badly enough then it is completely within your power to achieve it but now I really do feel that I am a step closer to making some changes in my life.		
1	I'm still not where I would like to be, but I feel that it is deifnitely less of a problem and, perhaps more importantly, that it is entirely within my power to change.		
3	I came away feeling excited by the ideas – especially the quantum physics related thoughts of this being the potentialities of my future and as though I would be able to achieve more of what will challenge and fulfill me than simply getting back on the mortgage treadmill.		
5	It might be that I am facing a big change in my life soon but feel calmer and more resourceful and more able to deal with it now.		
32	I have always struggled to be confident in the face of conflict and i think the workshop has definitely helped me deal with this - i feel more prepared for conflict and calmer in general		

Theme: Mo	Theme: More Control				
Code		More Choice			
Participant					
No.					
1	I have been wanting to make some changes in my life for a while but haven't really been able to see clearly what I should do It made me realise that I don't have to follow one straight path and that I have different options.				
11	if we challenge our self-limiting beliefs and vision new outcomes we can create them. (latent)				
11	I left the workshop knowing that I have a life that I like, where there are choices to be taken and enjoyed not feared, and where I am happy.				
12	but it has made me question the way I view myself and I think I can change things, (latent)				
18	It showed me I have a choice about what that perception is. Once I've made the choice to perceive it differently I can now replace it with a different perception				

20	I am more aware of how I can change my feelings/ emotions /approach to certain situations /problems. (latent)
31	I feel that I can choose what I want and how I want to feel about things as apposed to reacting emotionally to situations without logic.
32	the workshop brought home that everything is in my hands and sometimes you need to be reminded of that.
32	I think it makes me feel better because it immediately gives me an alternative scenario which calms me down

Theme: Shift	t in perception		
Code	Shift in perception (semantic)		
Participant No.			
11	The opportunity to consider self-limiting beliefs <i>and</i> positive self-beliefs was very 'balancing' and enabled me to see that I am far more than the sum of my self-limiting beliefs!		
11	I came away seeing more clearly that I am not the same person that I was five years ago, and recognising how much my ability to like myself, appreciate others and see the positives has grown		
11	Before I had tended to consider that the view others held of me 'must be right because they see me as I really am' however I now recognise that their view is subjective.		
12	but it has made me question the way I view myself and I think I can change things, so it may in time alter my view of myself.		
13	your workshop has made me see that the time I've spent over the years blaming people in my childhood for my low self-esteem has been counter-productive. I can change the way I perceive the start of my low self-esteem,		
16	What the workshop did do for me was to show me new thinking patterns based on the ideas given on the day in things such as quantum science and different ways of viewing situations, myself and others		
20	I felt the exercises were useful in looking at things from a different perspective and stepping outside to look in at what is really going on.		
26	Although I am basically quite happy with life my perception has been altered as I now know that I can tackle the areas which have been holding me back		
31	I felt very comfortable and reassured that it is OK to move on, look back at what has happened from a meta perspective and to then use the experience to move forward.		
29	has helped strengthened my positive aspects so when I feel under threat or unbalanced by external responses I am better able to stay in perspective and consider the changes I might need to make		

Theme: Shift in perception		
Code	Shift in perception (latent)	
Participant		
No.		
6	It gave me time to think and reflect and helped me to view myself and others in a kind and positive way.	
8	It was such a relief to know it is possible to change the way I see myself and to learn to like me more No one is a lost case.	
10	Previously I often used to enter into cycles of self-destruction but now self-negativity does not even enter my mind.  I have not experienced even one episode of agonising over negative emotions or dwelling on 'could/should have beens' - I really feel that I have moved on.	
18	Once I understood that negativity came from an outdated view it really helped me move those views to the file marked 'past and gone'.	

20	I feel that the workshop does make you realise that your problems may seem huge to
	you but there are others out there dealing with so much moreand your problems are
	not as bad as they seem.
21	I'm certainly less critical of myself in this respect.
32	I still have a lot up in the air and i am not totally satisfied but I have hope and potential
	which I hadn't really focussed on before.
33	now rather than focussing on things that perhaps are not quite the way I would want
	them to be.
34	The workshop showed me that I can change my attitude and think in a more positive
	way, which has improved my outlook on life.

Theme: Shift Perception		
Code	Not changed at all	
Participant		
No.		
28	life is just particularly hard going at the moment and the course could have changed my	
	perception of that but it hasn't	
22	I have no perception of any impact the workshop has had on my satisfaction with life	

Theme: Shift perception		
Code		Reminded life is good
Participant		
No.		
6		e "flying trance" sessions, looking back over my past and ahead to the now lucky I am (and have been) and made me feel that everything will
9		quite how satisfied with my life I was -but it has made me re- el about a number of things
11		knowing that I have a life that I like, where there are choices to be not feared, and where I am happy.
20	really that bad – p	ws you to really focus on yourself and makes you realise that life isn't articularly the time-line exercise gives you such a sense of did I get to where I am today? Where am I going in the future?)
32	The time module t	hat we did in the afternoon has made me feel more satisfied with life
33		p has served as a timely reminder that there are many things in my life proud of and take the opportunity to enjoy in the here and now
13	I realise that I nee (latent)	ed to be more grateful for what I have and live more in the moment.
23	It has helped me t I've got.	to by really happy with the position that I'm in, and to appreciate what
31	with what I have a	ction with my life, the workshop made me feel that I should be happy achieved and that I can shape the way in which I do things by in the most positive and productive way.

Theme: Well being		
Code	Live in the now	
Participant		
No.		
1	I need to live more in the present and start finding ways to be happy whilst I'm still in	
	my current situation.	
13	I realise that I need to be more grateful for what I have and live more in the moment.	
32	Also the session on timeline and the fact that the present is formed by the future has	
	really made me realise how important the "now" is.	

33	I feel the workshop has served as a timely reminder that there are many things in my life
	which I should be proud of and take the opportunity to enjoy in the here and now

Theme: Well being		
Code		Improvement in well being
Participant No.		
6	I was pretty happ workshop was a b	y with my life before the workshop and I remain so afterwards. The oost
10	Consequently feeling more confident in these areas makes me feel more satisfied with the work element of my life.	
24	Greatly - think I a	m more realistic and less comparative (in response to q)
24		health is fairly stable and my stamina has improved and I believe this is efs' which is "I feel well and pain free".
25	_	bove response, the workshop gave me confidence and confirmation of sses, therefore helping improve my satisfaction with life.
26	- I think its going	to improve my satisfaction with life - yeh!
27	when I turned bad	timeline meditation at the end I felt great pain going into the future but ck to the NOW the pain had gone and in the main it seems to have is incredible as since 1974
27	My well-being has you both.	also got consideraby better especially since doing the timeline with
29	think that I deser	action with life was quite high. However after the workshop I started to ved more and need/want to work and search harder for the outcome showed which was very satisfactory.
32	1	that we did in the afternoon has made me feel more satisfied with life -
34	It has improved it	and opened my mind to try new things. (in response to q)

Theme: Well being		
Code	Feelings of contentment, better, stronger, joy, calmer	
Participant		
No.		
10	This metaphor released so many positive and exciting feelings for me and reminding me the joy of facing challenges.	
10	I spend less time worrying about what 'others' think as I feel more contented with just being me	
31	By the end of the day I felt invigorated and content	
4	Initially I found I felt much better and empowered but as the weeks go by I feel less so mainly because with two children under 5 and a job where I often work into the evenings I dont get time to apply the techniques	
32	I think it makes me feel better because it immediately gives me an alternative scenario which calms me down	
7	I feel better about myself since the workshop	
7	I feel stronger, more able to express myself and generally have an overall better opinion of myself.	
5	I seem to be a little bit calmer and not get stressed as easily as before	
19	I have felt much calmer and more self assured since the workshop	
32	I feel more prepared for conflict and calmer in general	

Theme: Imp	rove self esteem
Code	Improve self esteem
Participant No.	
1	This positive thinking has impacted on my confidence and self esteem. I don't think it is any coincidence that since the workshop I have signed up for a two year course to study to become a craniosacral therapist - something I never even considered prior to the workshop.
4	I feel a positive result is given by the fact that I may now have some tools to effect a change in areas that I feel need to change, which is in itself empowering and increases positive self esteem.
6	I left the workshop feeling tired (I felt we worked hard) but positive and happy. I think the workshop has boosted my self esteem. It was a good decision to do it, it was a really fun day, I learnt new things and I felt good about myself!
7	I do feel that the increase in self esteem may enable me to make changes that could increase my satisfaction, although these changes are dependant on others.
10	I have yet to experience a situation which puts this to the test. However, even the thought of such a meeting makes me feel enthusiastic rather than daunted. So this has impacted on my feeling of self esteem in a positive way.
13	The workshop had quite an impact on my self esteem. When I came to the workshop I'd filled in the forms stating one case I needed to work on, but during the day I felt this changed.
13	With regards to the impact on my self-esteem, the main thing I learnt from the workshop, apart from the techniques which were great, was that the technique /exercise doesn't always work on its own, and that it's important to look beyond it to plan strategies for coping with the situation.  My self-esteem rose during the day and has continued to do so. The most important thing I took from the day was "I AM ENOUGH".
13	My self esteem has rocketed since spending the day with you. I feel far more confident in all avenues of my life. As I mentioned before, the main thing I took away with me that day was "I am good enough" and I say this often if I'm feeling a little wobbly. That day helped me to realise exactly where my lack of self esteem came from, and I have been able to work through some of these things and realise that they're assumptions made by other people. This, along with the "I am good enough" saying, has made my self esteem rise not only in how I feel more confident outwardly, but also inwardly with regards to how I perceive myself, both my physical body and my personality. I have values that are important to me that I have taken from people in the past and also values that I have chosen, but I have always kept these to myself and was always the quiet person in the corner never joining in the conversations, although my friends say I am the most confident person they know. Now that I've worked on my self esteem I'm not afraid to act with strangers the way I do with friends. The day spent with you and Joe has made
23	a huge difference to my life thank you!  The workshop yesterday made me feel empowered, as it gave me tools which I hope will help me get to where I'm going (self-esteem up). But, on the other hand I didn't bounce out of bed this morning (bouncing out of bed rather than snoozing was one of the things I worked on in the workshop), which has made me wonder whether I can do it (self-esteem down). I'm not taking this too seriously though as it's only he day after. I do tend to run myself in circles promising changes which I don't make. If I find that these tools (which I will use again) don't work for me and feed these circles then the outcome will be flat - or negative in the short term. However, I feel like if they work then I'll be unstoppable, which is always a good feeling. (Of course if they don't work for me I'll just try something else!)
24	Enormously - declining but am swishing and swapping beliefs as often as possible
25	The workshop put into words a lot of what I feel I already do & how I think things through. So the impact is that it has given me confidence in the way I deal with life and therefore my self esteem.

27	I thoroughly enjoyed the workshop and it has definitely made a profound effect on my self esteem
27	My self esteem has really changed for the better, everyone has noticed!
29	The biggest change in my self esteem is in a contentment about being me and that me being enough. (Wow)
30	I definitely felt that after the workshop there had been an increase in my self esteem. I also tried out one of the exercises over the following days and again, felt some benefit. In one particular instance I repeated the exercises before an event and was pleasantly surprised at how effective the anchoring was, especially as I was a little cynical at the start of the workshop!
30	Immediately after the workshop I noticed a perceptible increase in my self esteem. I continued to use the exercises covered in the workshop for a around a week afterwards and again, would say that I noticed an increase in self esteem and general well being as well as confidence
31	The workshop certainly had an impact on my self esteem, I would say that during the workshop I did not feel that my self esteem was being impacted or changed. By the end of the day I felt invigorated and content. I started to feel confident and good about myself in general. I certainly felt happy and ready to make any changes, I felt motivated and ready to make a change, so much so that I am looking for a new job this morning.
31	The workshop has made me feel that I need to move on and that holding onto the past is holding me back. I felt very comfortable and reassured that it is OK to move on, look back at what has happened from a meta perspective and to then use the experience to move forward. This boosted my self esteem as I always felt as though I could not let go because I was not allowed to. I believe in my ability more now than I did before the workshop. I have made a pledge to myself that I will continue to believe in myself and not doubt my ability.
32	I have always struggled to be confident in the face of conflict and i think the workshop has definitely helped me deal with this - i feel more prepared for conflict and calmer in general - maybe this is an improvement in self esteem
33	The ability to listen/talk and share experiences with other participants helped me re- evaluate my thoughts/beliefs on my own self esteem in a more positive manner. Additionally, some of the techniques/tools you shared with use (especially the on around beliefs) was extremely powerful and I will continue to practice and apply to other areas.

Theme: Improve self esteem		
Code	Latent improve self esteem	
Participant		
No.		
1	I can't really put my finger on how the workshop has helped, but it has had a positive effect.	
3	It is hard for me to answer this as my self esteem is taking a concerted and brutal battering from my employer who is in the process of pushing me out of the organization Do I feel stronger to deal with it as a result of the workshop? Maybe.	
4	I do feel better in myself but can't quite put my finger on how or why and I'm concerned the benefits might be short lived due to lack of time for practise!	
5	Now when you said if you are not sure if you can do it than just fake it really helped as I have been doing this all along and whilst faking developed the skills and esteem in this area.	
6	I have felt more sure of what I want. I didn't specifically work on the actual issues which now seem clearer to me but I have felt recently that I "know" what I should be doing and I have made some important decisions in respect to my future.	
7	My self esteem has improved and I feel better about myself since the workshop. I revisited some activities that I found helpful and useful when I started to slip back to the old me.	

8	I have mixed feelings On one hand it gave me hope and courage to know that those
	upsetting thoughts I often have about myself can be changed for more positive ones through training and through the exercises we learnt.
10	During the changing beliefs exercise I tackled a multitude of negative parental labels.
	For example, you are not clever enough, you are not fast enough, you are not good
	enough.
	During the exercise I could not find a non-negative phrase to counter these. Then Joe
	mentioned someone he knew who used the phrase 'I am enough'. That was it!!
	Immediately my mind created the image of a yellow banner on a pole which I gently
10	waved back and forth so that it was above my head for all to see – 'I am enough'.
10	The above issues relate to my previous feelings of being 'not good enough' - I genuinely do not feel that this in an inhibitor for me any more.
11	At the workshop the thoughts that spoke most to me were that each of us has value and
	worth, that another person's opinion of us is subjective –not objective – and we don't
	have to 'own it', that changing ourselves changes the world around us, and that if we
	challenge our self-limiting beliefs and vision new outcomes we can create them.
14	The techniques used I have started to utilise on a regular basis and found it takes little
	time each day to achieve noticeable results. There are most tangible improvements in
	work dealings and like regular visits to the gym for physical health, regular application of
16	NLP is proving a valuable addition to life quality.
16	I am not sure at this stage if the workshop has had a direct impact on my self esteem as I am unsure self esteem is one of my issues. What the workshop did do for me was to
	show me new thinking patterns based on the ideas given on the day in things such as
	quantum science and different ways of viewing situations, myself and others. I am also
	now more aware of self talk and will monitor this. I enjoyed the guided meditation and
	this was the most profound impact on me from the workshop and I enjoyed this way of
	viewing my time line.
20	Self Esteem for me is something which cannot be changed overnight and although I did
	feel more positive after the workshop, I still question whether this is because you're in a
	room full of people who share a similar level of self-esteem (or maybe lower than your
	own) and you feel better that others are in the 'same boat' – it helps to share your experience with others.
21	I left the workshop with the words "I am a good business woman" running round my
	head. I haven't had the opportunity to put anything specific into practice with this yet,
	but I've definitely noticed that I'm taking a subtly more positive and proactive approach
	to tackling the stuff in my in-tray in the days since the workshop.
23	The workshop was fun and felt really good. I love learning and am in the very fortunate
	position where a lot of my current energy can be focused on me, personal growth, so it
	was ideal. By the end of the workshop my feeling of "everything will be all right" was higher than when I got in.
	Higher than when I got in.

Theme: Improve self esteem		
Code	More confident	
Participant		
No.		
1	I definitely feel more positive in all areas of my life. This positive thinking has impacted on my confidence and self esteem.	
5	But the change belief really had an impact, so much that on Sunday morning I was so forgetful as if somebody had reconnected some synapses. Amazing! I have not come across the actual situation yet but feel more confident I will handle it more positively.	

5	And rather than concentrating on the little imperfect things I
7	can now see the bigger picture more clearly.
10	I feel better about myself, having more confidence and increased feelings of self worth.  The workshop exercises gave me the opportunity to focus on the key elements where I have obstacles and enabled me to release the key issues that affect this area the most. I already feel more confident that I will be able to appropriately join in discussions with senior managers and directors, that 'I am enough' and that I will let go of old emotions that no longer serve a purpose.
10	I now speak with ease to the directors where I currently work and do not feel inhibited in anyway.  I have attended three interviews since the workshop - I felt assertive, self assured and
	on an equal level to the interviewers - who were directors/CEOs.  I was unsuccessful in two of the interviews - the outcome is not particularly relevant - it was great to feel great - the third I am waiting to hear about  I did not feel a lowly me anymore - I feel that I have a lot of skills knowledge and experience and that I can really help move the right organisation forward.  I realise I have lost that crumbling/sinking feeling - I feel so bold.
20	Initially it felt very good and I recognised areas I felt confident in terms of my job role. However, there have been some days where it has not been so good but I feel I am better able to deal with those days. After the workshop, you feel motivated to try the techniques and reflect on what you learnt but sometimes you slip back into 'real life' and the techniques are not the first thing that come to mind.
	Generally, I felt positive about the workshop and my self esteem and feel I am taking the right action to address it further.
21	The second aspect was my self esteem relating to my career, where despite running my own business for 7 years, I keep telling myself that I'm not a good business woman and that I will fail. I'm concerned that I've started to turn this into a self-fulfilling prophecy. In the workshop I put the statement "I am a good business woman" into my place of certainty (although whilst doing it I had an immense urge to throw up – it took 4 goes to get it to stay down!). I've been re-affirming this since the workshop and now feel more confident in my abilities as a business woman – I am now able to recognize those things I do well and acknowledge (and work on) those things that I would like to develop, I'm certainly less critical of myself in this respect. This has been really useful as I was almost at the point of giving up my business and now I see that it does have a future which I am capable of driving forward.
25	The workshop put into words a lot of what I feel I already do & how I think things through. So the impact is that it has given me confidence in the way I deal with life and therefore my self esteem.
26	Generally better overall I think. I am actually welcoming the chance to present my ideas to others and am noticing that I am happy to take the lead to drive projects forward. No so timid which is good!
27	Anyway, my wednesday evening meditation circle decided to put it to the test and last night I stood in front of them (it was only 6 people but I couldn't have done it last week) I couldnt believe the difference I didnt have any nerves at all in fact I was exhilarated by it - they were all amazed.
30	Immediately after the workshop I noticed a perceptible increase in my self esteem. I continued to use the exercises covered in the workshop for a around a week afterwards and again, would say that I noticed an increase in self esteem and general well being as well as confidence
31	I have felt more confident and have not hesitated when making decisions, I feel like I have taken more control of my life instead of being dicatated too. I am more positive in my outlook and I am doing what I want to do. My positive attitude seems to be rubbing off on other people too and I am finding that people are more receptive to what I have to say. I feel that I can choose what I want and how I want to feel about things as apose to reacting emotionall y to situatuions without logic.

32	I have always struggled to be confident in the face of conflict and i think the workshop has definitely helped me deal with this - i feel more prepared for conflict and calmer in general - maybe this is an imptrovement in self esteem
32	I need to put this into practice but I have been thinking a lot about the techniques - esp the swish and change exercises. I think that when faced with a row (with my mum) the emotion will ruin my technique - but nonetheless i definitely feel more confident deep within.
33	Immediately after the workshop I felt really energised and positive about the whole experience.  Over the next few days I shared my experience of the workshop with a number of colleagues and friends, which required me to relive/practice the techniques covered during the course. I honestly felt that while I did this my confidence and self belief in these areas improved/remained positive.

Theme: Improve self esteem		
Code	Acceptance	
Participant		
No.		
9	I have realised there is no point hanging on to guilt - what's done cannot be undone and I am not the only person ever to have made the mistakes of which I feel guilty.	
9	Also, I have come to accept that my husband is who he is and I must accept it without annoyance - which is very soothing!!	
9	It does not make me a lesser person because I am not perfect (I know, I know, I should be saying I'm perfect -but I would really have to work very hard on that - experience tells me it is not so!!)	
10	I spend less time worrying about what 'others' think as I feel more contented with just being me	
10	If there is something I do not know I no longer 'emotionally beat myself up' about it and feel that I am rubbish - I just accept that I cannot know everything about everything. I am confident to be free to change my mind - if something is taking too much time or effort and the means do not justifiy the end - then I do not feel like I am giving up or a looser.	
11	I came away seeing more clearly that I am not the same person that I was five years ago, and recognising how much my ability to like myself, appreciate others and see the positives has grown. I left the workshop knowing that I have a life that I like, where there are choices to be taken and enjoyed not feared, and where I am happy.	
11	. I value what is good and constructive about me more, and this now gives me more of a sense of balance when I reflect on the things I wish I had done differently, or would like to change about myself. I am far more realistic about myself, and see myself as a more rounded and balanced person who in the main can have a positive rather than negative impact.	
13	My self esteem has rocketed since spending the day with you. I feel far more confident in all avenues of my life. As I mentioned before, the main thing I took away with me that day was "I am good enough" and I say this often if I'm feeling a little wobbly. That day helped me to realise exactly where my lack of self esteem came from, and I have been able to work through some of these things and realise that they're assumptions made by other people. This, along with the "I am good enough" saying, has made my self esteem rise not only in how I feel more confident outwardly, but also inwardly with regards to how I perceive myself, both my physical body and my personality. I have values that are important to me that I have taken from people in the past and also values that I have chosen, but I have always kept these to myself and was always the quiet person in the corner never joining in the conversations, although my friends say I am the most confident person they know. Now that I've worked on my self esteem I'm not afraid to act with strangers the way I do with friends. The day spent with you and Joe has made a huge difference to my life thank you!	

14	Greater self acceptance - of positives and negatives. Realisation that positive thinking does not work. if i try to think positive all day something negative always happens to balance it. This is not a bad thing - I have realised it is a universal law - like a coin has 2 sides. I have all traits that all people exhibit at some time and I always seek that which I perceive as missing even though in reality it is not really. I have previously tried to 'push down' my negative traits but see that this is futile as everyone has them
16	It added new depth to my understanding of life which to me is very important and for that I thank you all. The more I learn the more I understand that letting go and excepting is the route forward as we complicate life far too much! So thank you for reaffirming that I am beautiful, intelligent and wonderful, just because I am!
21	In the workshop I put the statement "I am a good business woman" into my place of certainty (although whilst doing it I had an immense urge to throw up – it took 4 goes to get it to stay down!). I've been re-affirming this since the workshop and now feel more confident in my abilities as a business woman – I am now able to recognize those things I do well and acknowledge (and work on) those things that I would like to develop, I'm certainly less critical of myself in this respect. This has been really useful as I was almost at the point of giving up my business and now I see that it does have a future which I am capable of driving forward.
24	On the whole my health is fairly stable and my stamina has improved and I believe this is due to a 'new beliefs' which is "I feel well and pain free".
29	The biggest change in my self esteem is in a contentment about being me and that me being enough. (Wow)
31	I am learning that only I can make these choices and that I need to take time out for myself and focus on who I really am. I now see that I was so caught up in what i thought was right and the perfect life that I didn't take a step back and look at it from another perspective. I have now seen that what I thought was perfect was not so perfect and now I can continue my search for what i really want.
31	This boosted my self esteem as I always felt as though I could not let go because I was not allowed to. I believe in my ability more now than I did before the workshop. I have made a pledge to myself that I will continue to believe in myself and not doubt my ability.