# Is NLP based on science or is it pseudoscience?

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## Introduction

*This brief article has been adapted from Dr Phil Parker's PhD thesis.*


NLP has had a mixed reception, being popular with the public and widely used in businesses and organisations, with 326 National Health Service (NHS) trusts and strategic authorities spending in excess of £800,000 on NLP-related training between 2006 and 2009 (Sturt et al., 2012). A recent systematic review found that NLP can be effective for improving a wide range of work-related psychological outcomes including self-esteem and occupational stress (Kotera, Sheffield, & Van Gordon, 2018), but up until recently NLP has been often discounted by mainstream psychology (Karunaratne, 2010). This article discusses the issues that created that situation and considers what is required from the field to further develop credibility. It concludes that NLP has an evidence base of peer-reviewed publications and as a result the pejorative label of pseudoscience that has sometimes been applied to it should be retired.

## NLP

Developed in the 1970s by a team lead by Bandler, Grinder and Pucelik (Grinder & Pucelik, 2013), it began as a modelling project, attempting to identify common patterns of intervention and thought processing in a range of psychotherapists and academics (Perls, Satir, Erickson, Bateson, Korzybksi, Rogers and Watszlawick) (Bandler, Grinder, & DeLozier, 1975; DeLozier & Grinder, 1987; Grinder & Pucelik, 2013).

These diverse original influences have resulted in some variance in definitions of NLP depending on the focus of the authority, Grimley notes 14 in his paper on 'what is NLP?' (2016). The Concise OED's definition is: 'a system of alternative therapy intended to educate people in self-awareness and effective communication, and to change their patterns of mental and emotional behaviour.' (Soanes & Stevenson, 2006).

### Science and Pseudoscience

The Webster dictionary defines sciences as:

'knowledge or a system of knowledge covering general truths or the operation of general laws especially as obtained and tested through scientific method'

where the scientific method is:

'principles and procedures for the systematic pursuit of knowledge involving the recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of hypotheses'.(Webster, 2020)

Pseudoscience is defined as a pejorative term used to describe claims that lack scientific evidence (Burke, 2017). As a label it has some issues, being divisive and lacking a precise agreed-upon set of criteria. This makes the term's use questionable and has resulted in a growing body of academic opinion that recommends its removal (Burke, 2017; Gordin, 2017).

## Research, Criticism and Debate

Bostic St Clair (Grinder & Pucelik, 2013) posits that the looseness in formulation of NLP may have provided some scope for creativity, with every session typically tailored to that client in that moment, rather than reproducing generic intervention strategies. However this also created a lack of standards of training and delivery in practice (Grimley, 2016) and this variability produces serious research methodology issues and difficulty in evaluating NLP as a single field.

This uncertainty has been added to by the results produced by the earliest attempts to evaluate NLP (Einspruch & Forman, 1985, 1988; Sharpley, 1984, 1987), which found little supportive evidence of a presumed link between eye movements, language and mental processing. However some commentators consider these studies to have methodological and conceptual flaws (Gray, Wake, & Cheal, 2012) noting the narrow research focus into particular aspects of NLP that were not considered central to it by experts in the NLP field, such as eye movements, and a lack of understanding of what was being measured. However, this arguably poorly constructed research became part of an initial evidence base that was referenced and directed future studies (Gray et al., 2012).

A more robust research approach has resulted in a range of published papers, (Arroll et al., 2017; Bigley et al., 2010; Cheal, 2007; Genser-Medlitsch & Schütz, 2004; Gray et al., 2012; Grimley, 2016; Hollander & Malinowski, 2016; Karunaratne, 2010; Kudliskis, 2013; Kudliskis & Burden, 2009; Linder-Pelz, 2010; Ojanen, 2005; Sahebalzamani, 2014; Sahi & Määttä, 2013; Sterman, 1991; Stipancic, Renner, Schütz, & Dond, 2010; Sturt et al., 2012, 2012; Tosey & Mathison, 2003; Wake, Gray, & Bourke, 2013; Wake & Leighton, 2014; Witt, 2008) which begun the overdue process of creating an evidence base. A recent meta-analysis (Zaharia, Reiner, & Schütz, 2015) which considered trials of NLP as a psychotherapeutic intervention, whilst recognising, 'there is a major lack of high-quality data from observational, experimental studies or randomized trials on this field…' concludes 'Our meta-analysis review found evidence to support the positive effects of this form of psychotherapy (Zaharia et al., 2015, p. 361).

In spite of this small but growing evidence base, NLP appears to have become stigmatised, as noted by the authors of a paper on NLP's brief phobia cure for heights (Arroll et al., 2017) who reported that their paper was originally rejected by a well-respected journal, along with the advice to remove the references to NLP in order to achieve publication (Arroll & Henwood, 2017). The authors reported that when this singular change was made, publication was achieved. This has the potential to create a vicious circle where NLP can be dismissed as an approach for having no evidence base, but is obstructed in creating an evidence base, in which it is explicitly named, because it isn't considered a valid approach.

## Conclusion

There is a growing evidence base of peer-reviewed publications identifying the efficacy of NLP in a range of areas. Much of the criticisms of NLP appear to stem from an unhelpful bias that seems to be derived from focusing on the earlier poorly-structured studies and a lack of awareness of the more

recent publications. The NLP field has a role to play in resolving this by engaging more fully in research despite the difficulties (Grimley, 2016) in creating robust research in fields currently without established academic structures, credibility or funding. It is hoped this article helps add clarity to the confused, and often partisan, debate in the field and encourages the retirement of the clearly inappropriate term pseudoscience and a renewed interest in academic research from practitioners and researchers.

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20 years ago Phil created the Lightning Process which helps individuals to profoundly change their lives and health. Since then he has trained practitioners who deliver it in 15 countries and on 5 different continents.

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Phil completed his PhD in the Psychology of Health at London Metropolitan University and is involved in research into a number of areas including the Lightning Process and Substance Use Disorders. Phil has also written 4 books to help people to make change in their lives and

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Outside of his work Phil has many interests and passions including music (he once played the guitar with Eric Clapton but that's another story...!), travel, photography, his dog Luna and of course his friends and family.  Many of these things influence, and are discussed in, his trainings and his valued newsletters.

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