1 TITLE PAGE

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- 3 Title: The role of philosophical hermeneutics in contributing to an understanding of
- 4 physiotherapy practice: a reflexive illustration.

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26	Abstract
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28	Title: The role of philosophical hermeneutics in contributing to an understanding of
29	physiotherapy practice: a reflexive illustration.
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31	This paper provides an overview of Philosophical Hermeneutics based on the work
32	of German philosopher Hans Georg Gadamer. The concepts of the 'hermeneutic
33	circle' as a vehicle for interpretation, management of the researcher's pre-
34	understandings (prejudices), and the 'fusion of horizons' are introduced and
35	illustrated by examples from the first author's research, before considering how
36	rigour can be achieved in this type of research. The actual research study which
37	aimed to explore how shared decision making and patient partnership are addressed
38	by physiotherapists in the process of exercise prescription for patients with low back
39	pain (LBP) is not the focus of this paper. However short descriptions of the study are
40	used to explore issues surrounding a hermeneutic inquiry.
41	For physiotherapists interested in research or considering undertaking an interpretive
42	phenomenological inquiry, this theoretical discussion paper explores how Gadamer's
43	philosophy offers a credible framework for undertaking such research.
44	
45	Key words
46	Philosophical Hermeneutics
47	Interpretive Phenomenology
4 8	Physiotherapy

Research

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The role of philosophical hermeneutics in contributing to an understanding of physiotherapy practice: a reflexive illustration.

Introduction

The landscape in which physiotherapists practice continues to evolve, bringing with it new and exciting challenges, which include developing a greater understanding and appreciation of both patients' and clinicians' care experiences. In research a qualitative methodology is appropriate when the aim is to gain insight into the ways that people perceive, interpret and explain their world. Within physiotherapy the amount of qualitative research published has steadily expanded in line with the increasing acceptance that the physiology of the human body cannot be separated from the psychosocial factors contributing to the experience of pain, illness and disability [1]. There are many philosophical orientations and methodologies available to researchers within the 'qualitative' research toolbox, but ultimately, the choice depends upon the research question and the skills and position of the researcher in relation to research processes.

This paper provides an overview of the key features of a Philosophical Hermeneutic inquiry and demonstrates how this 'interpretive' orientation based on the work of German philosopher Hans Georg Gadamer [2] provided credible and rigorous guidance for a doctoral research study undertaken by the first author [3]. This paper offers an insight into some concepts described by Gadamer [2] that were useful in facilitating understanding of participants' experiences, such as the 'Hermeneutic Circle' as a vehicle for interpreting the text, tradition, the importance and management of the researcher's pre-understandings (prejudices), dialogue, and the

contribution of the concept of 'Fusion of Horizons'. Finally it considers how rigour (trustworthiness) can be achieved in this type of research.

A full account of the research to which this paper relates exploring the process of exercise prescription for patients with low back pain (LBP), taking into account issues such as decision making and how this accords with patient preferences and experiences has been previously reported [4,5].

This article may be of interest to allied health professionals in advanced practice roles, and those undertaking higher degrees and planning research, to decide whether Philosophical Hermeneutics is suitable as a foundation for research projects seeking to answer questions related to the experiences of clinical staff or patients.

Background

Phenomenology, which can refer to a philosophy with a set of principles which can be used to underpin a methodology has two different philosophical traditions; descriptive and interpretive. 'Descriptive' phenomenology seeks to describe rather than explain, and starts from a researcher perspective free from pre-conceptions [6, 7]. In contrast, a researcher using 'interpretive' phenomenology aims to describe, consider and interpret participants' experiences [8]. This involves gathering context-specific, in-depth accounts of perceptions using inductive, qualitative methods such as interviews, participant observations and other bespoke creative methods to present an interpretation of the meaning of the experiences of research participants. Phenomenological approaches have previously been adopted within physiotherapy

[9, 10] although as Walsh [11] found with nursing research, the particular philosophical tradition within these studies is often not explicitly defined or apparent. The marriage of phenomenology and hermeneutics was introduced into modern philosophy by Heidegger in opposition to Husserl's Transcendental Phenomenology [6, 12]. The discovery of the ontological significance of understanding formed the foundation of Heidegger's 'new' phenomenology which was a major turning point in hermeneutic theory, and Gadamer's work can be conceived as an attempt to work through the implications of it. All deliberate interpretation takes place on the basis of historicity, that is, on the basis of a pre reflective understanding of 'being' in relation to the interpreter's past and future [2].

Phenomenology therefore becomes hermeneutical when its method is taken to be interpretive. As a contemporary philosophy and research methodology, hermeneutics is concerned with the thick description which emanates from people's detailed stories of their experiences in their everyday understanding of 'Being-in-theworld'. Hermeneutics is described as a method which facilitates interpretation of texts within certain contexts, where 'texts' refers to sources of information in addition to the written or spoken word [13]. The 'hermeneutic circle' is a metaphor used to describe the dynamic movement which occurs between parts and the whole of the text whilst seeking 'verstehen' (understanding). The researcher constantly weaves in and out of data sets whilst conducting the research reflexively, so that the researcher's 'self' is central to understanding and interpretation using Gadamerian Hermeneutics.

The study itself took place in a musculoskeletal physiotherapy service delivered across seven departments in South West England. The study involved collecting data which explored both physiotherapists' and patients' perspectives and experiences of exercise prescription for the management of LBP and the extent to which this was a collaborative process. Analyses based on the work of Gadamer address data as 'text'. In this study, text was in the form of observation field notes and transcribed interviews (informal field interviews and more formal semi-structured interviews), which was then placed alongside and fused in context with the author's experiences or pre-understandings as a physiotherapist with extensive knowledge of managing patients with LBP to facilitate interpretation allowing for a more complete understanding.

Within qualitative research the process of examining and recording the impact of the researcher and the intersubjective elements on the research is known as 'reflexivity' [14]. Being 'reflexive' requires researchers to focus on how their presence and positioning might influence the research process and outcomes. Identification of their pre-understandings or prejudices of the topic enhances transparency and also helps them to examine their prejudices and the degree to which these influence subsequent interpretation by trying to remain open to all possible alternative meanings. These were therefore set out prior to the commencement of the research study. In addition rather than presenting a sanitised account, reflexivity was used to highlight how the researcher's 'self' used their experience and insider perspective to obtain richer data. This specific comportment towards the participants and clinical setting enabled the researcher greater access to their world to understand, interpret and make meaning of the data.

The Hermeneutic Circle

Gadamer used Heidegger's Hermeneutic Circle as the central organising concept in hermeneutics [12]. The idea of the Hermeneutic Circle (see figure 1) is that the understanding of a piece of text always modifies the whole and the constituent parts. Tuohy et al. [15] described this 'circularity of understanding' as the manner in which interpretation is achieved by the reciprocal process of questioning with the aim to discover the true meaning of experience for that person. However, a circle has no end point, implying that existing interpretations can be challenged, and more meaningful insights may come along. In some qualitative methodologies data saturation is required to recognise the end of new insights, but in Philosophical Hermeneutics they are replaced, thus no meaning saturation can exist [16].

Insert Figure 1 about here

Entering the Hermeneutic Circle involved the author using their own experiences or pre-understandings as a physiotherapist working with patients with LBP to better appreciate the participants' experiences. To achieve this, a critical self-awareness of their professional background, views and experiences were juxtaposed alongside accounts of the participants, and brought into the Hermeneutic Circle to create an understanding and interpretation of those narratives. In an effort to make this process both visible and transparent, personal reflections of how experiences were used to gain an understanding and interpretation of the data were set out in a different font in the doctoral research report in sections termed 'reflective comments' [3].

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In the study, interviews were used to explore physiotherapists' and patients' perspectives of the characteristics and processes of exercise prescription, and uncover explicit details that are normally implicit such as feelings, understandings and decision making. In transcribing the interviews the author became involved in the 'circularity of understanding', engaging with the participants' narratives to try and gain a true understanding for each person. For example it became apparent early on that exercise was almost regarded as the 'default' approach to care for this patient group. However, when deciding on the type of exercise to be prescribed, it emerged that the physiotherapists perhaps more than had been anticipated, had a thorough appreciation of the evidence base for the effect of exercise therapy in the management of LBP and voiced an awareness that patient preference should be considered as an intrinsic motive to initiate and maintain an exercise programme. Yet despite this, all but one talked about constructing an intervention based on specific postural, structural or biomechanical problems identified at assessment, such that the focus of the interaction appeared to be on the clinical condition and not the person.

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According to Gadamer [2] there can be no understanding without the activity of questioning, and Koch [16] argued that for a text to become an object of interpretation it must ask a question of the interpreter. Throughout the process of understanding, the dialogue that occurred between the researcher and the 'texts' led to the formation of several questions in the researchers mind such as; 'Do physiotherapists, based on their perceived professional role, have a feeling that they have not done their job properly unless they have given the patient a specific regime

of home exercises?' 'Does this approach help to reinforce their own professional identity as physiotherapists, and offer a way for the therapist to remain in control of the situation?'

By accessing experiences of the physiotherapists and patients, in hermeneutic terms the author was able to use their experiences to discuss key factors relating to exercise prescription and patient participation that were identified in the observations or from the informal field interviews. This allowed for the Hermeneutic Circle to be experienced and through such feedback and subsequent dialogue shared understandings reached.

Acknowledging the effects of pre-understandings and experience of the researcher. One of the core features of Philosophical Hermeneutics is the notion of pre-understandings, pre-conceptions, or what Gadamer considered as 'prejudices'.

Gadamer declared that we live within traditions that are part of our history, and it is only through this historical awareness and past experiences that understanding is possible; researchers cannot simply rid themselves of what they know and think [17]. Gadamer maintained that it is impossible to lose one's pre-understandings, arguing that it is only through our 'prejudices' that we can begin to understand the 'lifeworld' of others; there can be no understanding without having first understood [18]. This perspective has important implications for physiotherapists aiming to use qualitative methodologies because their professional background is rooted in positivism and the importance of a single reality and logic to investigate the physical sciences.

Researchers within the physical science traditions or even those following a Husserlian phenomenological approach might contend that in order to understand

the nature of a phenomenon all prejudice must be eliminated [6]. However, it was considered that the researcher's past experiences could not simply be 'bracketed' by employing certain methods, and so a reflexive form of bracketing was used, as to suspend the subjectivity of the researcher given their professional background, was deemed to be unachievable [19]. Gadamer viewed an awareness of historically informed prejudices as a basic contention of understanding:

"A person who believes he is free of prejudices, relying on the objectivity of his procedures and denying that he himself is conditioned by historical circumstances, experiences the power of the prejudices that unconsciously dominate him....A person who does not admit he is dominated by prejudices will fail to see what manifests itself by their light" [2, p.360].

Therefore Philosophical Hermeneutics was chosen as it allowed the physiotherapist researcher to remain visible in the 'frame' of the research as an interested and subjective co-participant rather than a detached and impartial observer. This, in turn, provided an opportunity to engage participants in bringing to awareness, describing and interpreting a particular aspect of clinical practice thus making their experiences accessible to the researcher.

Fusion of Horizons

'Fusion of horizons' was a key term for Gadamer which he associated with understanding and which occurs when the horizon of another person or text intersects with our own horizon, changing and extending our construction of understanding. For Gadamer hermeneutical understanding is also the result of

'fusion of horizons' between the past and our present which includes attention to the prejudices individuals bring to the interpretive event. In this research the historical horizon of the past was the personal and professional background of the researcher, combined with the literature relating to exercise prescription for LBP, patient-centred care and shared decision making, situated alongside the participants' texts. Using a hermeneutic approach and the concept of 'fusion of horizons', interpretation is seen as a process that permeates every activity such that the research account and findings that emerge are based on the specific interpersonal context of the researcher who uses 'Self' as a research tool. The Hermeneutic Circle facilitated interpretation of the participants' experiences whilst acknowledging the researcher's own anticipations and expectations of what they might do or say. Familiarity with physiotherapy practice also enhanced the quality of questioning during interviews; this may not have been achieved by a researcher unfamiliar with physiotherapy practice. Through such subsequent dialogue a richer understanding emerged and a new horizon formed between researcher and participants. This is, indeed, a useful position of understanding between the researcher and researched.

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Achieving trustworthiness (rigour)

Qualitative research is often criticised by physical science healthcare professionals for lacking methodological rigour and for introducing researcher bias. Freshwater [14] has argued that bias is inevitable in any research, although this may not always be fully known or understood by the researcher. Therefore any researcher, following a Gadamerian approach, has a responsibility to ensure that their research is 'trustworthy' in the sense of being able to demonstrate both rigour (process) and relevance (end product).

The concepts of validity, reliability and generalisability provide the traditional framework for evaluation of quantitative research; however these positivist concepts are inappropriate for qualitative research because they are concerned with measurement and representation, and qualitative researchers do not measure anything. The issue of appropriate qualitative criteria has been the subject of considerable debate, indeed Green and Thorogood [20, p.243] suggested that "the idea of quality criteria is a logical impossibility". Lincoln and Guba [21] proposed four criteria (credibility, transferability, dependability and confirmability) which linked well with the way the researcher accounted for their role in the research.

Koch [16, 22] argued that credibility is enhanced when researchers describe their experience as researchers, ensuring that sufficient detail and reflective writing is visible within the research report. Credibility can be further established by ensuring that the perspectives of participants are accurately accounted. In this study the researcher endeavoured to not misrepresent in anyway the perspectives of the participants which had been provided in good faith by the use of many original participant quotes. Credibility was further enhanced by returning to the research participants repeatedly during the research process. Doyle, [23] based on reports from other phenomenological researchers, commented that participants benefit from being treated as equals in the research process, and are interested to hear the researcher's interpretation of what they have shared. The use of text interpretation summaries allowed participants to comment on the accuracy and to critically reflect on the extent to which the researcher's interpretations reflected the experience of the phenomenon as understood by them [3,24]. This approach further fitted with

Gadamer's description of the Hermeneutic Circle, and also allowed for Gadamer's notion of the 'fusion of horizons' as returning data interpretation to the participants offered the opportunity to stimulate shared understandings.

One way for a Gadamerian based research study to demonstrate dependability is for the process to be audited. A study and its findings are auditable when another researcher can clearly follow the decision trail used by the investigator in the study, and the researcher's position vis-a-vis the research process is transparent. True to the philosophical approach it is acknowledged that the researcher's previous experiences unquestionably influenced the interpretive perspectives and ways of constructing meaning and they could not be certain that another researcher would arrive at the same conclusions given the same data, perspective and situation.

Nevertheless transparency about the research method, and presentation of a detailed discussion of the findings should allow a cautious reader to decide whether the findings 'fit' into contexts outside the study situation which are both meaningful and applicable in terms of their own experiences (transferability) [22].

Using this interpretive phenomenological approach requires no independent analysis of the data. This is because data are co-constituted during the interview process between the researcher and participant, often as a result of intense engagement. Therefore 'objective verifiers' bring to the analysis their own pre-understandings with respect to past experiences, and this introduces a third dimension to the analysis – one that lacks the context of the interview event. To contribute to the rigour of the analysis process, the second author (TM) challenged (RS) about the methods employed to interpret the data.

Conclusion

This article has provided both a personal and theoretical insight into the use of Philosophical Hermeneutics and revealed how the concepts of the Hermeneutic Circle, position of the research 'Self', and Fusion of Horizons offer an approach for physiotherapists to explore their practice which contrasts to the traditional notions of objectivity and quantification. Based on the work of Gadamer this paper illustrates how his philosophical thinking and primacy of application to the understanding of texts can also be successfully applied to the understanding of healthcare situations within physiotherapy to explore both patients' and clinicians' perspectives more thoroughly. For those physiotherapists interested in research from a Hermeneutic Interpretive Phenomenological approach, this paper might be useful when deciding whether Philosophical Hermeneutics is an appropriate foundation for their research.

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Reference List

- [1] Foster NE, Delitto A. Embedding psychosocial perspectives within clinical management of low back pain: integration of psychosocially informed management principles into physical therapist practice—challenges and opportunities. Phys Ther 2011;91:790–803.
- [2] Gadamer HG. Truth and method. 2nd rev.ed. New York: Continuum; 1996.

- [3] Stenner R. (2014) Exercise prescription for patients with non-specific chronic low
- back pain: A qualitative exploration of physiotherapy practice. PhD Thesis, University
- of the West of England. http://eprints.uwe.ac.u/22930/
- 352 [4] Stenner R, Swinkels A, Mitchell T, Palmer S. Exercise prescription for patients
- with non-specific chronic low back pain: a qualitative exploration of decision making
- in physiotherapy practice. Physiotherapy (2015),
- 355 <u>http://dx.doi.org/10.1016/j.physio.2015.05.004</u>.
- [5] Stenner R, Swinkels A, Mitchell T, Palmer S. Exercise prescription for non-
- specific chronic low back pain (NSCLBP): a qualitative study of patients' experiences
- of involvement in decision making. Physiotherapy (2015)
- 359 http://dx.doi.org/10.1016/j.physio.2015.08.005.
- [6] Husserl, E. (1962) Ideas: General Introduction to Pure Phenomenology. Collier,
- 361 New York.
- [7] Giorgi, A. (1985) (Ed) Phenomenology and Psychological Research. Duquesne
- 363 University Press, Pittsburgh.
- [8] Dowling M. From Husserl to van Manen: a review of different phenomenological
- 365 approaches. Int J Nurs St 2007;44:131-42.
- [9] Dean SG, Smith JA, Payne S, Weinman J. Managing time: an interpretative
- 367 phenomenological analysis of patients' and physiotherapists' perceptions of
- adherence to the rapeutic exercise for low back pain. Disabil Rehabil 2005;27:625-
- 369 **36**.
- [10] Larsson I, Liljedahl K, Gard G. Physiotherapists' experience of client
- participation in physiotherapy interventions: a phenomenographic study. Adv
- 372 Physiother 2010;12:217-23.

- [11] Walsh K. Philosophical hermeneutics and the project of Hans Georg Gadamer:
- implications for nursing research. Nurs Inq 1996;3:231-7.
- [12] Heidegger M. Being and time. Translated from the German by J. Macquarie and
- 376 E. Robinson. Oxford: Basil Blackwell;1962.
- [13] Honderich T. The Oxford companion to philosophy. Oxford: Oxford University
- 378 Press;1995.
- [14] Freshwater D. Writing, rigour and reflexivity in nursing research. J Res Nurs
- 380 2005;10: 311-5.
- [15] Tuohy D, Cooney A, Dowling M, Murphy K, Sixsmith J. An overview of
- interpretive phenomenology as a research methodology. Nurse Res 2012; 20:17-20.
- [16] Koch T. An interpretive research process: revisiting phenomenological and
- hermeneutical approaches. Nurse Res 1999;6:20-34.
- [17] Flood A. Understanding phenomenology. Nurse Res 2010;17:7-15.
- [18] Fleming V, Gaidys U, Robb Y. Hermeneutic research in nursing: developing a
- Gadamerian-based research method. Nurs Ing 2003;10:113-20.
- [19] Gearing RE. Bracketing in research: a typology. Qual Health Res 2004;14:1429-
- 389 52.
- [20] Green J, Thorogood N. Qualitative methods for health research.
- 391 London:Sage;2004.
- [21] Lincoln YS, Guba EG. Naturalistic inquiry. Beverly Hills, CA:Sage;1985.
- [22] Koch T. Establishing rigour in qualitative research: the decision trail. J Adv Nurs
- 394 1994;19:976-86.
- 395 [23] Doyle S. Member checking with older women: a framework for negotiating
- meaning. Health Care Women Int 2007;28:888-908.

[24] Mays N, Pope C. Qualitative research in health care: Assessing quality in
 qualitative research. BMJ 2000;320:50-2.

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Figure 1. The Hermeneutic Circle

