1 **TITLE PAGE**

2

3 **Title:** The role of philosophical hermeneutics in contributing to an understanding of

4 physiotherapy practice: a reflexive illustration.

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25

26   **Abstract**

27

28   **Title**: The role of philosophical hermeneutics in contributing to an understanding of

29   physiotherapy practice: a reflexive illustration.

30

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

48   Physiotherapy

49   Research

50

51   The role of philosophical hermeneutics in contributing to an understanding of

52   physiotherapy practice: a reflexive illustration.

53

54   Introduction

55   The landscape in which physiotherapists practice continues to evolve, bringing with it

56   new and exciting challenges, which include developing a greater understanding and

57   appreciation of both patients' and clinicians' care experiences. In research a

58   qualitative methodology is appropriate when the aim is to gain insight into the ways

59   that people perceive, interpret and explain their world. Within physiotherapy the

60   amount of qualitative research published has steadily expanded in line with the

61   increasing acceptance that the physiology of the human body cannot be separated

62   from the psychosocial factors contributing to the experience of pain, illness and

63   disability [1]. There are many philosophical orientations and methodologies available

64   to researchers within the 'qualitative' research toolbox, but ultimately, the choice

65   depends upon the research question and the skills and position of the researcher in

66   relation to research processes.

67

68   This paper provides an overview of the key features of a Philosophical Hermeneutic

69   inquiry and demonstrates how this 'interpretive' orientation based on the work of

70   German philosopher Hans Georg Gadamer [2] provided credible and rigorous

71   guidance for a doctoral research study undertaken by the first author [3]. This paper

72   offers an insight into some concepts described by Gadamer [2] that were useful in

73   facilitating understanding of participants' experiences, such as the 'Hermeneutic

74   Circle' as a vehicle for interpreting the text, tradition, the importance and

75   management of the researcher's pre-understandings (prejudices), dialogue, and the

76   contribution of the concept of 'Fusion of Horizons'. Finally it considers how rigour

77   (trustworthiness) can be achieved in this type of research.

78

79   A full account of the research to which this paper relates exploring the process of

80   exercise prescription for patients with low back pain (LBP), taking into account

81   issues such as decision making and how this accords with patient preferences and

82   experiences has been previously reported [4,5].

83

84   This article may be of interest to allied health professionals in advanced practice

85   roles, and those undertaking higher degrees and planning research, to decide

86   whether Philosophical Hermeneutics is suitable as a foundation for research projects

87   seeking to answer questions related to the experiences of clinical staff or patients.

88

89   <u>Background</u>

90   Phenomenology, which can refer to a philosophy with a set of principles which can

91   be used to underpin a methodology has two different philosophical traditions;

92   descriptive and interpretive. 'Descriptive' phenomenology seeks to describe rather

93   than explain, and starts from a researcher perspective free from pre-conceptions [6,

94   7]. In contrast, a researcher using 'interpretive' phenomenology aims to describe,

95   consider and interpret participants' experiences [8]. This involves gathering context-

96   specific, in-depth accounts of perceptions using inductive, qualitative methods such

97   as interviews, participant observations and other bespoke creative methods to

98   present an interpretation of the meaning of the experiences of research participants.

99   Phenomenological approaches have previously been adopted within physiotherapy

100   [9, 10] although as Walsh [11] found with nursing research, the particular

101   philosophical tradition within these studies is often not explicitly defined or apparent.

102   The marriage of phenomenology and hermeneutics was introduced into modern

103   philosophy by Heidegger in opposition to Husserl's Transcendental Phenomenology

104   [6, 12]. The discovery of the ontological significance of understanding formed the

105   foundation of Heidegger's 'new' phenomenology which was a major turning point in

106   hermeneutic theory, and Gadamer's work can be conceived as an attempt to work

107   through the implications of it. All deliberate interpretation takes place on the basis of

108   historicity, that is, on the basis of a pre reflective understanding of 'being' in relation

109   to the interpreter's past and future [2].

110

111   Phenomenology therefore becomes hermeneutical when its method is taken to be

112   interpretive. As a contemporary philosophy and research methodology,

113   hermeneutics is concerned with the thick description which emanates from people's

114   detailed stories of their experiences in their everyday understanding of 'Being-in-the-

115   world'. Hermeneutics is described as a method which facilitates interpretation of

116   texts within certain contexts, where 'texts' refers to sources of information in addition

117   to the written or spoken word [13]. The 'hermeneutic circle' is a metaphor used to

118   describe the dynamic movement which occurs between parts and the whole of the

119   text whilst seeking 'verstehen' (understanding). The researcher constantly weaves in

120   and out of data sets whilst conducting the research reflexively, so that the

121   researcher's 'self' is central to understanding and interpretation using Gadamerian

122   Hermeneutics.

123

124   The study itself took place in a musculoskeletal physiotherapy service delivered

125   across seven departments in South West England. The study involved collecting

126   data which explored both physiotherapists' and patients' perspectives and

127   experiences of exercise prescription for the management of LBP and the extent to

128   which this was a collaborative process. Analyses based on the work of Gadamer

129   address data as 'text'. In this study, text was in the form of observation field notes

130   and transcribed interviews (informal field interviews and more formal semi-structured

131   interviews), which was then placed alongside and fused in context with the author's

132   experiences or pre-understandings as a physiotherapist with extensive knowledge of

133   managing patients with LBP to facilitate interpretation allowing for a more complete

134   understanding.

135

136   Within qualitative research the process of examining and recording the impact of the

137   researcher and the intersubjective elements on the research is known as 'reflexivity'

138   [14]. Being 'reflexive' requires researchers to focus on how their presence and

139   positioning might influence the research process and outcomes. Identification of their

140   pre-understandings or prejudices of the topic enhances transparency and also helps

141   them to examine their prejudices and the degree to which these influence

142   subsequent interpretation by trying to remain open to all possible alternative

143   meanings. These were therefore set out prior to the commencement of the research

144   study. In addition rather than presenting a sanitised account, reflexivity was used to

145   highlight how the researcher's 'self' used their experience and insider perspective to

146   obtain richer data. This specific comportment towards the participants and clinical

147   setting enabled the researcher greater access to their world to understand, interpret

148   and make meaning of the data.

149

150   <u>The Hermeneutic Circle</u>

151   Gadamer used Heidegger's Hermeneutic Circle as the central organising concept in

152   hermeneutics [12]. The idea of the Hermeneutic Circle (see figure 1) is that the

153   understanding of a piece of text always modifies the whole and the constituent parts.

154   Tuohy et al. [15] described this 'circularity of understanding' as the manner in which

155   interpretation is achieved by the reciprocal process of questioning with the aim to

156   discover the true meaning of experience for that person. However, a circle has no

157   end point, implying that existing interpretations can be challenged, and more

158   meaningful insights may come along. In some qualitative methodologies data

159   saturation is required to recognise the end of new insights, but in Philosophical

160   Hermeneutics they are replaced, thus no meaning saturation can exist [16].

161

162   *Insert Figure 1 about here*

163

164   Entering the Hermeneutic Circle involved the author using their own experiences or

165   pre-understandings as a physiotherapist working with patients with LBP to better

166   appreciate the participants' experiences. To achieve this, a critical self-awareness of

167   their professional background, views and experiences were juxtaposed alongside

168   accounts of the participants, and brought into the Hermeneutic Circle to create an

169   understanding and interpretation of those narratives. In an effort to make this

170   process both visible and transparent, personal reflections of how experiences were

171   used to gain an understanding and interpretation of the data were set out in a

172   different font in the doctoral research report in sections termed 'reflective comments'

173   [3].

174

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.

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

199   of home exercises?' 'Does this approach help to reinforce their own professional

200   identity as physiotherapists, and offer a way for the therapist to remain in control of

201   the situation?'

202

203   By accessing experiences of the physiotherapists and patients, in hermeneutic terms

204   the author was able to use their experiences to discuss key factors relating to

205   exercise prescription and patient participation that were identified in the observations

206   or from the informal field interviews. This allowed for the Hermeneutic Circle to be

207   experienced and through such feedback and subsequent dialogue shared

208   understandings reached.

209

210   <u>Acknowledging the effects of pre-understandings and experience of the researcher</u>

211   One of the core features of Philosophical Hermeneutics is the notion of pre-

212   understandings, pre-conceptions, or what Gadamer considered as 'prejudices'.

213   Gadamer declared that we live within traditions that are part of our history, and it is

214   only through this historical awareness and past experiences that understanding is

215   possible; researchers cannot simply rid themselves of what they know and think [17].

216   Gadamer maintained that it is impossible to lose one's pre-understandings, arguing

217   that it is only through our 'prejudices' that we can begin to understand the 'lifeworld'

218   of others; there can be no understanding without having first understood [18]. This

219   perspective has important implications for physiotherapists aiming to use qualitative

220   methodologies because their professional background is rooted in positivism and the

221   importance of a single reality and logic to investigate the physical sciences.

222   Researchers within the physical science traditions or even those following a

223   Husserlian phenomenological approach might contend that in order to understand

224 the nature of a phenomenon all prejudice must be eliminated [6]. However, it was

225 considered that the researcher's past experiences could not simply be 'bracketed' by

226 employing certain methods, and so a reflexive form of bracketing was used, as to

227 suspend the subjectivity of the researcher given their professional background, was

228 deemed to be unachievable [19]. Gadamer viewed an awareness of historically

229 informed prejudices as a basic contention of understanding:

230

231 *"A person who believes he is free of prejudices, relying on the objectivity of his*

232 *procedures and denying that he himself is conditioned by historical circumstances,*

233 *experiences the power of the prejudices that unconsciously dominate him....A person*

234 *who does not admit he is dominated by prejudices will fail to see what manifests*

235 *itself by their light"* [2, p.360].

236

237 Therefore Philosophical Hermeneutics was chosen as it allowed the physiotherapist

238 researcher to remain visible in the 'frame' of the research as an interested and

239 subjective co-participant rather than a detached and impartial observer. This, in turn,

240 provided an opportunity to engage participants in bringing to awareness, describing

241 and interpreting a particular aspect of clinical practice thus making their experiences

242 accessible to the researcher.

243

244 <u>Fusion of Horizons</u>

245 'Fusion of horizons' was a key term for Gadamer which he associated with

246 understanding and which occurs when the horizon of another person or text

247 intersects with our own horizon, changing and extending our construction of

248 understanding. For Gadamer hermeneutical understanding is also the result of

249 'fusion of horizons' between the past and our present which includes attention to the

250 prejudices individuals bring to the interpretive event. In this research the historical

251 horizon of the past was the personal and professional background of the researcher,

252 combined with the literature relating to exercise prescription for LBP, patient-centred

253 care and shared decision making, situated alongside the participants' texts.

254 Using a hermeneutic approach and the concept of 'fusion of horizons', interpretation

255 is seen as a process that permeates every activity such that the research account

256 and findings that emerge are based on the specific interpersonal context of the

257 researcher who uses 'Self' as a research tool. The Hermeneutic Circle facilitated

258 interpretation of the participants' experiences whilst acknowledging the researcher's

259 own anticipations and expectations of what they might do or say. Familiarity with

260 physiotherapy practice also enhanced the quality of questioning during interviews;

261 this may not have been achieved by a researcher unfamiliar with physiotherapy

262 practice. Through such subsequent dialogue a richer understanding emerged and a

263 new horizon formed between researcher and participants. This is, indeed, a useful

264 position of understanding between the researcher and researched.

265

266 Achieving trustworthiness (rigour)

267 Qualitative research is often criticised by physical science healthcare professionals

268 for lacking methodological rigour and for introducing researcher bias. Freshwater

269 [14] has argued that bias is inevitable in any research, although this may not always

270 be fully known or understood by the researcher. Therefore any researcher, following

271 a Gadamerian approach, has a responsibility to ensure that their research is

272 'trustworthy' in the sense of being able to demonstrate both rigour (process) and

273 relevance (end product).

274

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.

284

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

299 Gadamer's description of the Hermeneutic Circle, and also allowed for Gadamer's

300 notion of the 'fusion of horizons' as returning data interpretation to the participants

301 offered the opportunity to stimulate shared understandings.

302

303 One way for a Gadamerian based research study to demonstrate dependability is for

304 the process to be audited. A study and its findings are auditable when another

305 researcher can clearly follow the decision trail used by the investigator in the study,

306 and the researcher's position vis-a-vis the research process is transparent. True to

307 the philosophical approach it is acknowledged that the researcher's previous

308 experiences unquestionably influenced the interpretive perspectives and ways of

309 constructing meaning and they could not be certain that another researcher would

310 arrive at the same conclusions given the same data, perspective and situation.

311 Nevertheless transparency about the research method, and presentation of a

312 detailed discussion of the findings should allow a cautious reader to decide whether

313 the findings 'fit' into contexts outside the study situation which are both meaningful

314 and applicable in terms of their own experiences (transferability) [22].

315

316 Using this interpretive phenomenological approach requires no independent analysis

317 of the data. This is because data are co-constituted during the interview process

318 between the researcher and participant, often as a result of intense engagement.

319 Therefore 'objective verifiers' bring to the analysis their own pre-understandings with

320 respect to past experiences, and this introduces a third dimension to the analysis –

321 one that lacks the context of the interview event. To contribute to the rigour of the

322 analysis process, the second author (TM) challenged (RS) about the methods

323 employed to interpret the data.

324

325   <u>Conclusion</u>

326   This article has provided both a personal and theoretical insight into the use of

327   Philosophical Hermeneutics and revealed how the concepts of the Hermeneutic

328   Circle, position of the research 'Self', and Fusion of Horizons offer an approach for

329   physiotherapists to explore their practice which contrasts to the traditional notions of

330   objectivity and quantification. Based on the work of Gadamer this paper illustrates

331   how his philosophical thinking and primacy of application to the understanding of

332   texts can also be successfully applied to the understanding of healthcare situations

333   within physiotherapy to explore both patients' and clinicians' perspectives more

334   thoroughly. For those physiotherapists interested in research from a Hermeneutic

335   Interpretive Phenomenological approach, this paper might be useful when deciding

336   whether Philosophical Hermeneutics is an appropriate foundation for their research.

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342

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Figure 1. The Hermeneutic Circle

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                    ┌─────────────────────┐
                    │  Entering the circle │
                    │    and beginning     │
                    │ interpretation of the│
                    │        text          │
                    └─────────────────────┘
                              │
                              ▼
              ┌─────────────────────────┐
              │      Understanding       │
              │  horizons and initial    │
              │  interpretation of the   │
              │     individual texts     │
              └─────────────────────────┘

  ┌──────────────────────┐              ┌──────────────────────┐
  │ Review of personal   │              │  Fusion of horizons  │
  │ understanding and    │              │  and interpretation  │
  │ formation of new     │              │   of the whole text  │
  │      horizons        │              └──────────────────────┘
  └──────────────────────┘
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