

## Original Article

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# The journey to radiographer advanced practice: a methodological reflection on the use of interpretative phenomenological analysis to explore perceptions and experiences

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## Abstract

**Introduction:** This paper is a methodological reflection on the use of interpretative phenomenological analysis (IPA) utilised in the context of a qualitative research project that explored perceptions and experiences of the journey to radiographer advanced practice.

**Methods and materials:** A two-phase qualitative research explored the perceptions and experiences. Phase 1 reviewed reflective diaries ( $n = 12$ ) kept during the educational phase of the practitioner journeys. Phase 2 included one-to-one, semi-structured interviews ( $n = 6$ ) which were recorded, transcribed verbatim and reviewed using the IPA six-stage thematic analysis for practitioners embedded in the advanced practice role.

**Findings:** Key themes arising from reflective diary analysis informed the interview content; and following interview transcription, data immersion and IPA, 12 emergent sub-themes generated 3 superordinate themes.

**Discussion:** Theoretical perspectives and application of the methodology are discussed. The phenomenological and interpretative qualities of IPA have the potential to provide unique and valuable insights into lived experiences of individuals. It is hoped that this researchers' reflections are transferrable for those interested in employing a qualitative methodology for radiotherapy and oncology research.

**Conclusion:** Therapeutic radiographers work within rapidly changing environments from technological, treatment and care perspectives. With continued development and change, the impact of research utilising an IPA methodology may allow exploration of perceptions and experiences from a range of key stakeholders with the potential to increase the research base.

## Introduction

The early 1980s had witnessed great dis-enchantment regarding the limits of logical-empirical enquiry<sup>1</sup> which resulted in the growing popularity of a range of qualitative methodologies, aligned with the post-positivist paradigm.<sup>2</sup> Research questions focused upon discovery, description and meaning rather than prediction, control and measurement. In order to explore the concept of individual life experience, the selection of a suitable qualitative methodology required careful consideration.<sup>3–5</sup> Exploration was intended to elaborate on conceptually rich and contextually grounded accounts to allow better understanding of research phenomena. A modern-day qualitative research approach, interpretative phenomenological analysis (IPA), can be described as a triad of philosophy, methodology and method<sup>6–8</sup> and appeared on the scene in the mid-1990s. Designed in response to belief that research had neglected accounts of subjective experience, the aim was to capture conscious life experience as experienced from the first-person point of view,<sup>9,10</sup> with a focus towards something that mattered to individuals and something they had an understanding of.<sup>10</sup>

Therapeutic radiographers work within rapidly changing environments from care, financial, target, technological, treatment and workforce perspectives. Increased demand has resulted in expansion of radiotherapy services and review of skill mix within radiotherapy and oncology practice.<sup>11</sup> Similar to diagnostic imaging, there is acknowledgement that a significant proportion of routine work can be delivered by appropriately trained, non-medical healthcare professionals.<sup>11</sup> Extended scope practice and transition through the radiography four-tier structure<sup>12</sup> has resulted in positive improvements to service and increased job satisfaction but comes with associated challenge, emotion, increased responsibility and accountability.<sup>13–20</sup> The scope of radiographic practice<sup>21</sup> specific to the therapeutic radiographer workforce identified an increasing range of pre-treatment, treatment and post-treatment activities, practitioner-led treatment planning, practitioner-led on-treatment review, supplementary prescribing, tumour site specialisms and technical specialist roles. Due to the range and diversity of developments, there is scope

**Table 1.** Phases of study, methods of data collection, dates and participant numbers by phase

PHASE 1	Reflective diaries ( <i>n</i> = 12)	May 2009–September 2011
PHASE 2	Semi-structured interviews ( <i>n</i> = 6)	April 2013–July 2013

for the use of a qualitative research approach to explore perceptions for key individuals experiencing change.

A recent literature search identified the use of IPA in several papers focusing on radiotherapy patient perceptions and experiences with a further two papers exploring radiotherapy practitioner perceptions.<sup>22,23</sup> The purpose of this paper is to reflect upon the theoretical underpinnings of IPA and its application as a qualitative research methodology. Although the focus is on research that explored the perceptions and experiences of practitioners on a journey to advanced practice in diagnostic imaging, it is hoped that the paper will be informative and inspire the use of IPA for future radiotherapy and oncology research.

## Methods and Materials

Ethical approval was granted from Glasgow Caledonian University with Research and Development Site-Specific permission granted from four Scottish Health boards.

IPA's reported ability to provide both stance and process for qualitative data analysis<sup>24</sup> justified the selection for a two-phase study (Table 1) which included a small homogenous group of diagnostic practitioners. Although the small sample size could be seen as a limitation, this conforms with the ethos of IPA.<sup>10</sup> IPA utilises a range of methods to gather data<sup>25,26</sup> and reflective diaries in phase 1 (*n* = 12) and one-to-one semi-structured interviews in phase 2 (*n* = 6) informed data collection. The analytic process was adapted from the six-stage format (Table 2) outlined by Smith et al.<sup>10</sup>

## Results

Key themes arising from reflective diary analysis informed the interview content and following interview transcription, data immersion and IPA, 12 emergent sub-themes generated three superordinate themes (Table 3). Further detail on research design, rationale, literature review, methodology, participant anonymity and key findings can be found in previous papers.<sup>19,20</sup>

## Discussion

As a qualitative research approach, IPA's routes are set in: phenomenology, hermeneutics and idiography. Consideration is also required for the 'double hermeneutic' and researcher reflexivity and the following applies the underlying principles in context.

### Phenomenology

Phenomenology was arguably the most significant philosophical movement in the 20th century. Associated literally with the study of phenomena, phenomenological philosophy provides a rich source of ideas about how to examine and comprehend lived experiences. Debate, however, surrounded what phenomenological philosophy meant for empirical research,<sup>27–29</sup> with arguments revolved around three key issues: the question of description versus interpretation, the search for the universal structures of experience

**Table 2.** Stages for interpretative phenomenological analysis (Adapted from Smith et al.<sup>10</sup>)

1. Reading and re-reading transcripts (and listening and re-listening to recordings)
2. Initial noting
3. Developing emergent themes
4. Searching for connections across emergent themes
5. Moving to the next interview
6. Looking for patterns and themes across the interviews

**Table 3.** IPA Superordinate themes derived from phase 2 interviews

1. Embarking upon the advanced practitioner journey – preparation for the advanced practice reporting role.
2. Travelling along – Exposure to the advanced practice reporting role.
3. Destination and beyond – Review upon and action for the advanced practice reporting role.

versus the analysis of the individual case and the question whether a phenomenological analysis should be directed towards the pre-reflective or the reflective levels of consciousness.<sup>30</sup>

IPA is said to be phenomenological because the principle focus is directed towards the exploration of the individual experience,<sup>31–33</sup> which complemented the aim of this study. IPA draws principally on the tradition of phenomenology, the philosophy attributed to Brentano, Husserl and Heidegger. Brentano stressed the importance of recognition of the 'intentional nature of consciousness', otherwise described as the 'internal experience of being conscious of something'. For Husserl, phenomenology was a descriptive psychology and an epistemological, foundational, eidetic discipline of the study of essences. In the words of Husserl<sup>34</sup> 'lived experience' signified 'a given-ness of internal consciousness and inward perceived-ness'. Heidegger further introduced the concept of 'being there' in relation to the dialogue between a person and their world, with Merleau-Ponty and Sartre suggesting that individuals exist in a lived world rather than in isolation. The lived world influenced individual perspectives on life and the aim was to establish what was at the core of subjective experience and eidetic perspectives. Smith et al.<sup>10</sup> described this as a set of invariant properties that lay underneath the subjective perception of individual manifestations of the object or essence, in this case the phenomenon of radiographer advanced practice.

For Barresi,<sup>35</sup> phenomenology began with analysis of consciousness which constructed the world, where, in addition, the focus was upon human existence and intentionality. Researchers attempt to gain an insider perspective, and achievement is through a process of empathic understanding.<sup>36</sup> Phenomenological approaches can be utilised retrospectively; and in this study context, participants were asked to reflect on the lived experience of their journey to advanced practice. Participant stories were prioritised as reflected within diaries and interviews; and as Van Manen<sup>37</sup> suggested, attempts were made to ensure that the phenomenological description would reverberate with ordinary experiences of life as well as with the sense of life's meaning. It is when people are engaged with an experience of something major in their lives that they begin to reflect on the significance of the event<sup>10</sup> which was in alignment with participant input to the research.

According to Willig,<sup>38</sup> valuable insights can be gained by experiences through the use of phenomenology but greater understanding can be achieved by engaging in further exploration through an

interpretative approach. IPA's phenomenological component provided the ability to gain insightful descriptions of the way practitioners experienced their world; but in order to maximise exploration of experience from a conscious perspective, interpretation was also required.

### *Hermeneutics*

Rutt<sup>39</sup> suggested a piece of phenomenology was always present and at play in hermeneutics, and hermeneutics without phenomenology was interpretation without context. IPA's second major theoretical axis was, therefore, its intellectual connection to hermeneutics,<sup>7,32,40</sup> with suggestion that the combination of empathic hermeneutics with questioning hermeneutics encompassed the key qualities required for communication between researcher and participants. Occurring at two levels, the first was concerned with the sense of detail where commitment was given to the depth of the analysis, and the second was concerned with the understanding of the experiential phenomenon, under exploration, which in this case is radiographer advanced practice.

Heidegger viewed the hermeneutic process as cycles of self-reference that situated our understanding in a priori prejudices and focused on the fore structures of understanding. Gadamer<sup>41</sup> developed the ideas of Heidegger and made reference to the 'hermeneutic circle' whereby he talked about going from the parts of something to the whole and back again. For Gadamer, the hermeneutic circle was an iterative process through which a new understanding of a whole reality could be developed by means of exploring the details of existence. The present could not be formed without the past and neither can exist without each other. There was belief that understanding came when the text and the interpreter were fused, otherwise known as the 'fusion of horizons'.<sup>41</sup> The horizon was the totality of all that could be realised or thought by any given person at a given time and within a particular situation. In the context of this study, both the interviewer and the interviewee went in to the interview with their own respective horizons, but arguably on completion both parties may have exited with different thoughts and ideas, whereby the initial horizon may have changed.

Gadamer's interpretation fits well with that of IPA, as Smith et al.<sup>10</sup> agreed that during the process of analysis, one moved back and forth through a range of different ways of looking at the data. To understand any given part, I looked at the whole, and to understand the whole, I needed to look at the parts. This was an important aspect whereby I was required to appreciate the complex, relative, sense-making processes of the participants. For Smith<sup>40</sup> experience could not be plucked straightforwardly from the heads of participants but instead required a process of engagement and interpretation on the part of the researcher. This research, therefore, combined the descriptive with the interpretative component during analysis of participant stories in an attempt to establish the essence of what the 'lived experience' of the advanced practice journey meant to individuals.

### *Idiography*

Another major influence for IPA was idiography. Smith et al.<sup>10</sup> argued that in contrast to traditional nomothetic approaches that focused on generalisability, the idiographic approach within IPA aims to investigate, in detail, how particular lived experiences were understood from the perspective of small groups of particular people, in a particular context. According to Cassidy et al.<sup>33</sup> and Brocki

and Weardon,<sup>42</sup> the idiographic nature of IPA allowed close attention to be paid to individual accounts. On reflection, adoption of IPA enabled disclosure of interesting and valuable insights that would make a meaningful contribution towards understanding the nuances of advanced practice. It was also assumed that participant accounts would resonate with future studies and contribute to a developing literature base.

### *Double hermeneutic*

Consistent with the ethos of IPA, participants and researcher were both involved in the interpretation process<sup>10,31</sup> referred to as the 'double hermeneutic'. I was aware that my participants were trying to make sense of their world, while at the same time I was trying to make sense of what my participants were trying to make sense of within their world. As said previously, one part of the analytic process involves the researcher trying to get close to the participant's personal world in order to take the insider's perspective,<sup>32</sup> and the second focuses upon what the analyst offers to the interpretive account. This process was complex with the acceptance that in combination with the complication of my own conceptions, my analysis and interpretation had potential to exert changes on the meaning of the text.<sup>43,44</sup> As the hermeneutic experience relates to the 'horizon' of the interpreter,<sup>45</sup> I was therefore conscious of approaching the data with my own 'horizons' while at the same time remaining cognisant and reflexive of the influence this could have.

### *Researcher reflexivity*

Reflexivity is a research technique utilised to enhance researcher recognition of the influence of self on their research.<sup>46</sup> The qualitative analysis process is a highly intuitive activity that required me to reflect the epistemological stance.<sup>47</sup> I acknowledged that as a researcher I would be seen to be engaged in the research setting, participating with the respondents as they reflected on the lived experience of their advanced practice journey. As I had been the educator and assessor of participants as they studied for their qualification, I accepted that this close relationship had the potential to bias my interpretations during the IPA. The frame of reference used in any analysis requires to be sufficiently coherent and clearly positioned<sup>25</sup>; hence, I was careful to document any thoughts and insights to ensure that I was reflexive and transparent during the analysis process to avoid unfounded assumptions.

### *Assessment of Quality*

Qualitative research has been described as exciting, challenging and mysterious,<sup>3,42</sup> but this systematic quest for new knowledge<sup>48</sup> required coherence, credibility and depth.<sup>10,49</sup> Smith et al.<sup>10</sup> referred IPA researchers to the approaches of Yardley<sup>49</sup> who presented general guidelines for assessing quality. Described as a more sophisticated and pluralistic stance, Yardley<sup>49</sup> proposed four broad principles: sensitivity to context, commitment and rigour, transparency and coherence and impact and importance which I applied for the study.

### *Sensitivity to context*

Smith et al.<sup>10</sup> had suggested that the very choice of IPA as a methodology and the rationale for its adoption would be centred upon the perceived need for sensitivity to context through the engagement with the idiographic and the particular. In context, this related to the advanced practice journey with emphasis placed

upon each individual. Homogenous samples were said to be difficult to recruit<sup>10</sup>; however, for this study all participants were known to me through their postgraduate qualification study process. All had given their permission and time to take part, with confidentiality assured by participant pseudonym.

Rachael had talked freely throughout her interview but I became aware that my role as an educator and assessor may have influenced her final response. As the interview came to a close, I had thanked her very much and she responded as follows.

Ra: You're very welcome.

I: Is there anything you would like to add or?

Ra: Erm, no, **I hope I've answered correctly ... I don't know what's right or what's wrong ...** [Laughter].

I: No, it's not, it's not meant to be correct.

Ra: Uh-huh, yes.

I: It's your, it's you, you've got the, the space of the floor ...

Rachael: transcript lineage 1106–1117

Sensitivity to context can also be demonstrated through appreciation of the interactional nature of data collection within the interview situation. Smith et al.<sup>10</sup> suggested that a good IPA interview was only as good as the data it was derived from and obtaining good data required close awareness of the interview process. Interviews had taken place at a time and venue most suitable to the participants, and at the start I had been careful to explain that I was available to listen to perceptions and experiences and that an interview script was only a prompt. I had aimed to put my participants at ease, show support, interest and empathy which arguably was confirmed in part by the quote from Rochelle,

Ro: *em quite relaxed I felt it really easy to talk about things, em quite sincere and not too difficult or challenging at all.*

Rochelle: transcript lineage 606–607.

As per IPA guidance,<sup>10</sup> I made every effort to follow due process, pay attention to details throughout the interview, not to interrupt and leave time for pauses for thought. This can also be seen within the transcript of Rebecca as I left time for her to think as she considered her response to the final interview question.

Re: Uh-huh ... um ... um ...

Re: *um ... just ... trying to think ... [long pause] ... If you can use an analogy of a road ...*

Rebecca: transcript lineage 1119–1135

Sensitivity to context continued through the analysis process and beyond. From initial data immersion, I continually needed to understand what the participants were trying to make sense of their lived experiences. I did this by reading reflective diaries and transcripts and listening to the interviews several times and recording my thoughts, feelings and ideas within my reflective log. Smith et al.<sup>10</sup> argued that the strongest context for IPA research was its sensitivity to the data and any IPA study should provide an appropriate number of verbatim extracts from participants. In accordance, I included numerous exemplars, auditable by pseudonym and transcript lineage, to support the thesis content. Although not prescriptive, I made every effort to ensure that each participant was represented throughout. The aim was to give all participants a voice and allow readers to cross reference any interpretation proposed and presented.

### Commitment and rigour

In relation to Yardley's second broad principle, Smith et al.<sup>10</sup> suggested that commitment from an IPA perspective can be

demonstrated in a number of ways. There was an expectation that commitment would be shown through the degree of attentiveness afforded to participants during the data collection process and the care with which the analysis of each case was carried out. In addition, as per direction of Smith et al.,<sup>10</sup> I took the IPA research process seriously and realised it required certain skills.

Rigour referred to the thoroughness of the study which for IPA can relate to the appropriateness of the sample to the question in hand, the quality of the interview and the completeness of the analysis undertaken. The study sample, consistent with IPA, was small and homogenous and selected from a cohort of students who had exited their programmes of study between 2009 and 2011. Good IPA studies tell the reader something important about the particular individual as well as something about the themes they share.<sup>10</sup> In an attempt to demonstrate commitment and rigour, I detailed demographics, thoughts, feelings, assumptions, challenges and successes per phase 1 group, per phase 2 group and per participant, as they 'embarked upon, travelled along and reached destination and beyond'.

### Transparency and coherence

In order to ensure transparency, I was careful to clearly describe the stages of the research process. From the coherence perspective, I aimed to present a coherent argument that clearly defined the themes and linked them together. Yardley<sup>49</sup> had suggested that coherence also referred to the fit between the research and the theoretical assumptions of the approach being implemented. In order to do this, I stayed consistent with the underlying principles of IPA and aimed to maintain phenomenological and hermeneutic sensibility during the write-up. For Smith et al.<sup>10</sup> the write-up should focus significantly on the experiential domain for the participants and I was expected to demonstrate commitment to attending closely to the 'thing' itself – the lived experience of the advanced practitioner journey. I was aware that the writing should be nuanced and cautious and should manifest IPA awareness as an inherently interpretative activity with acceptance that the findings were my interpretations of the perceptions and experiences of the participants.

### Impact and Importance

For Yardley,<sup>49,50</sup> the decisive criterion by which any piece of qualitative research must be judged was its impact and importance. It was not sufficient to develop a sensitive, thorough and plausible analysis, if the ideas I proposed had no influence on the beliefs or actions of anyone else. I acknowledged the many varieties of usefulness and the ultimate value of the research could only be assessed in relation to the objectives of the analysis, the applications it was intended for and the community for whom the findings were deemed relevant. Within the qualitative paradigm, there is more of a focus on the transferability of findings, rather than generalisation to a given population. This said, Smith et al.<sup>10</sup> argued for 'theoretical generalisability', which allowed me to assess evidence in relation to the existing professional and experiential knowledge. In alignment with Brocki and Weardon,<sup>42</sup> the inductive nature of IPA allowed me to discuss analysis in the light of varied existing psychological theories, models or approaches. The findings identified from the small homogenous group of practitioners, though unique, had the potential of transferability to other professions undergoing similar developments.

## Final Reflections

I am conscious that throughout this paper I have referred considerably to a text by Smith et al.,<sup>10</sup> but I feel this is justified as I would classify this as a key resource for novice IPA researchers. The words of the authors inspired me, supported me and motivated me during the research process and the final two sentences from the book resonate with my IPA experience ‘... We have found the process of doing IPA exhilarating, demanding and stimulating. We hope that you feel encouraged and stimulated by what you have read and you find your experience of IPA to be as enjoyable, as rewarding and as powerful as we have done’.<sup>10:206</sup> Although I had my journey planned, I was unsure what to expect and where and when I would arrive. I regularly referred to the text, each time learning and understanding more. I acknowledge it involved a steep learning curve but also a positive and enlightening experience; and similar to my participant journeys, I had embarked upon, travelled along and reached destination and beyond.

## Conclusion

This paper provided reflections on the theory and application of the use of IPA to explore the perceptions and experiences of radiographer practitioners as they journeyed to advanced practice. IPA is a modern qualitative approach, useful to explore the ‘lived experiences’ of individuals at any given moment in time. With continued development and change among radiotherapy practitioners and radiotherapy and oncology practice, the impact of research utilising an IPA methodology may further afford exploration of perceptions and experiences from a range of key stakeholders.

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