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Interpretative phenomenological analysis for LIS research

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Abstract

Purpose – The purpose of this paper is to provide an overview and evaluation of interpretative phenomenological analysis (IPA) for the library and information science (LIS) community, as this method has only recently been used for exploring experiences of various phenomena related to LIS.
Design/methodology/approach – IPA is discussed within the phenomenological tradition. Two examples of recent IPA studies are examined in parallel to show application of the IPA method. Issues and challenges of applying IPA to LIS research questions are discussed.
Findings – IPA is an alternative phenomenological method, adding to the repertoire of qualitative methods used for LIS research. It was an effective method for exploring experience among information professionals: it was equally suitable for studying reference and information service work for academic library professionals and burnout experience for information and communication technology workers.
Originality/value – Only a few LIS studies have used IPA and no discussion or evaluation of the method has been published for this field. This paper provides a discussion of the method for LIS researchers interested in this emerging phenomenological method.
Keywords Qualitative research, Research methods, Interpretative phenomenological analysis, Research methodology, IPA, Interpretive phenomenological analysis
Paper type Conceptual paper

Introduction

This paper offers a discussion of interpretative phenomenological analysis (IPA) in the context of library and information science (LIS) research and provides an in-depth discussion of issues in applying the method by means of two recent examples of IPA research. Since most of the IPA research to date is in health psychology, it can be a challenge to envision the usefulness of the method for LIS and how it can be implemented. The detailed discussion of the application of the method to explore various experiences of LIS professionals can serve as a model for future LIS researchers.

IPA originated with a paper by Jonathan Smith (1996) from Birkbeck University of London. Developed as a way to provide an in-depth, experiential perspective to quantitative experimental psychological studies, IPA has subsequently received greatest attention from psychology and health psychology researchers in the UK. IPA is a growing method with more studies being published every year (Smith, 2011, p. 12). The UK is still the hub of activity for the method, being the home of the annual conference and monthly workshops, as well as the major web site (www.ipa.bbk.ac.uk). However, the method is spreading from its origins in the UK to researchers in other countries (Smith, 2011, p. 12).

In addition to its geographic spread, the method is increasingly being used in fields outside psychology and health psychology. Smith (2011) provided some evidence of the

spread of IPA to other fields (p. 13) although his study is limited by his use of only Web of Science, Medline and PsycInfo as sources of data. His study does provide evidence of the growing use of the method and expansion into new disciplines. He stated "one challenge for the IPA community is to get high-quality papers accepted in non-psychology journals so that the examples of work are available to a wider audience" (p. 23).

The aim of this paper is provide an overview and introduction to IPA method for the LIS community. LIS community as a term used in this paper covers a broad range of professionals who provide data, documents, information, and knowledge, as well as the underlying technologies, products and services to their "customers," that is information seekers and users. We will refer to them as LIS professionals and/or users.

Traditional research problems that concern LIS community have been studied by using a broad repertoire of quantitative and qualitative methods. However when the focus of the research is to study the human experience of various phenomena, IPA method emerges as an excellent method for studying experiences in LIS community. This paper provides models for IPA's application to LIS research problems and an in-depth discussion of various issues in its application in LIS. To achieve these aims, IPA is first discussed within the context of the phenomenological tradition in LIS. Next, The authors' IPA studies are described in depth and used as a vehicle for discussion of issues in applying the method for LIS research.

The phenomenological approach

A brief introduction to phenomenology is provided to give a context and philosophical background for IPA. The word "phenomenology" comes from Greek: *phainómenon* "that which appears"; and *lógos* "study." Thus phenomenology is the philosophical study of the structures of experience and consciousness. As a philosophical movement, it was founded by Edmund Husserl in 1936 (Husserl, 1970). Phenomenology takes the intuitive experience of phenomena as the starting point and tries to extract from it the essential features of experiences and the essence of what we experience. This "insider perspective" is characteristic of the methodology of phenomenology. Phenomenology has been conceptualized as a philosophy, a research method and an overall perspective for qualitative research.

Phenomenological approaches are based in a paradigm of personal knowledge and subjectivity, and emphasize the personal perspective and interpretation. As such they are strong methods for understanding subjective experience, gaining insights into people's "life world" or lived experience. Further, presuppositions are suspended in favor of the descriptions given by the individual. Phenomenology emphasizes also intentionality of consciousness and reality is not divided into subjects and objects. The reality of an object is only perceived within the meaning of the experience of an individual. Moustakas (1994) expresses this as:

> […] to determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it. From the individual descriptions, general or universal meanings are derived, in other words the essences of structures of the experience (p. 13).

Within the phenomenological tradition there are two variants: "descriptive" and "interpretive" or hermeneutic phenomenology. Pure phenomenological research aims to describe rather than explain, and to start from a perspective free from hypotheses or preconceptions (Husserl, 1970). Heidegger, Gadamer, and Ricoeur are the foremost

representatives of the movement of hermeneutic phenomenology. Phenomenology becomes hermeneutical when its method is taken to be interpretive (rather than purely descriptive as in transcendental phenomenology of Moustakas). This orientation is evident in the work of Heidegger who argues that all description is always already interpretation and every form of human awareness is interpretive. "The meaning of phenomenological description as a method lies in interpretation," says Heidegger (1962, p. 37). Thus hermeneutical phenomenology attempts to understand the interpreted structures of experience and how we understand others and ourselves in the world around us. While Giorgi (1985) and Moustakas (1994) hold to a descriptive Husserlian method, others follow a more hermeneutic version: for example, the open life world approach of Dahlberg *et al.* (2008) and IPA (Smith, 2007).

The value of a phenomenological approach for LIS has been demonstrated in conceptual papers and research studies. Budd (1995, 2005) and Wilson (2003) have argued that a phenomenological approach is important to the understanding of issues in LIS. Budd *et al.* (2010) argued that a phenomenological approach to research can "find meaningful and substantive answers to questions that matter" (p. 269). Studies in LIS have used a variety of phenomenological approaches. For example, Introna and Ilharco (2004) used Heideggerian phenomenology to study the experience of computer and television screens. Dalbello (2005a, b) studied technological innovation and creative decision making from a general phenomenological perspective using grounded theory analysis. Kupers (2005) used the philosophical perspective of Merleau-Ponty to study implicit and narrative knowing in organizations. Limberg and Alexandersson (2003) used a phenomenological approach to study the school library as space. Savolainen (2008) used social phenomenology to study everyday life information seeking of environmental activists. Social phenomenology employs some quantitative aspects, such as frequency of occurrences of concepts. Although these examples are not an exhaustive list of phenomenological research in LIS, they demonstrate an interest in a phenomenological approach by LIS researchers and a variety of LIS research problems to which it can be applied.

A related approach is phenomenography. Although similar to phenomenology in many respects, phenomenography differs in its focus on variations of experience rather than on a common essence of an experience. It has not been used extensively in LIS, but it has been used to study the experience of information literacy (e.g. Bruce, 1997), the experience of information seeking (e.g. Limberg, 1999); and the experience of information use by managers (Kirk, 2002).

Situating IPA as a phenomenological approach

IPA offers an additional method for researchers wishing to take a phenomenological approach. It is similar to other phenomenological methods in its focus on understanding experience from the participant's perspective. But it is unique in its focus on the individual's experience of a phenomenon.

IPA is an approach to qualitative research concerned with exploring and understanding the lived experience of a specified phenomenon (Smith, 2004). As a methodology in its own right rather than simply a means of analyzing data, IPA involves the detailed examination of research participants' "lifeworlds"; their experiences of a particular phenomenon, how they have made sense of these experiences and the meanings they attach to them (Smith, 2004).

IPA is often identified as having three unique characteristics from which its procedures are derived: it is phenomenological, interpretative, and idiographic. IPA is

firmly rooted in a phenomenological approach to research, in general seeking to understand and describe the participant(s)'s experience. Larkin *et al.* (2006) stated "at the core of any piece of IPA research […] lies a clearly declared *phenomenological* emphasis on the experiential claims and concerns of the persons taking part in the study" (p. 104).

IPA is also interpretative. It goes beyond the descriptive, "position[ing] the initial 'description' in relation to the wider social, cultural, and even theoretical context" and "provid[ing] critical and conceptual commentary on participant's sense-making" (Larkin *et al.*, 2006, p. 104). Descriptions of IPA often use the term "double hermeneutic." By this term, IPA researchers mean that it deals with participants' interpretations of their experience and also the researchers' interpretations of participants' interpretations. This focus on interpretation beyond description places it more in line with the philosophy of Heidegger and Merleau-Ponty, than with that of Husserl. According to Fade (2004):

> The purpose of IPA is to attempt as far as possible to gain an insider perspective of the phenomenon being studied, whilst acknowledging that the researcher is the primary analytical instrument. The researcher's beliefs are not seen as biases to be eliminated but rather as being necessary for making sense of the experiences of other individuals. Reflexivity is viewed as an optional tool, enabling the researcher to formally acknowledge his or her interpretative role, rather than as an essential technique for removing bias. Based on a Husserlian view it could be argued that analysis cannot be both interpretative and phenomenological […]. IPA is phenomenological in that it seeks an insider perspective on the lived experiences of individuals, and interpretative in that it acknowledges the researcher's personal beliefs and standpoint and embraces the view that understanding requires interpretation (p. 648).

Perhaps the greatest distinction between IPA and other phenomenological methods is its focus on the idiographic. This term can have various meanings, but when used by IPA researchers it conveys the method's focus on individual experience. Thus, appropriate research questions for IPA focus on understanding individual experience within a given context. Research questions often use the verb "exploring" and focus on "understandings," "experiences," or possibly "perceptions" and "views" (Smith *et al.*, 2009, p. 46).

Rather than attempting to reveal only the shared experience or "essence" of the phenomenon, IPA studies value revealing differences in experience, as well. As IPA researches look for themes in common among all participants in their studies, they also try not to lose sight of the individual participant's experience of the phenomenon. Larkin (2011) described this process as "prioritiz[ing] each case as a case and then consider[ing] convergence and divergence across our data set" (n.p.). While general phenomenological studies tend to focus on a common experience, such as love or being angry, IPA focusses on "personal meaning and sense-making in a particular context, for people who share a particular experience" (Smith *et al.*, 2009, p. 45). This process differs from phenomenography in that the individual experience is retained. In phenomenography, the interview data are compiled, so that it is not the individual experience that is studied, but rather the combined experiences for all participants (Limberg, 2000).

An IPA study, rather than being guided by a particular theory, seeks to describe and interpret lived experience, then relate the findings to existing theory. Theory is as important to an IPA study as to a study where theory is used to generate a hypothesis. It is of critical importance in developing an initial research topic and after the data has been analyzed, as a way of making sense of the analysis. Smith *et al.* (2009) described

this process as "comparing the fit" between study findings and the literature and warned that it must be "done cautiously, and at the interpretative end of the analysis" (p. 48). According to Fade (2004) IPA allows for some general statements and theory development: "IPA can be used to develop in-depth descriptions of human experience. The techniques can also be taken further to develop theories, models and explanations that help us understand human experience better" (p. 647).

Some researchers may prefer to simply follow a method's procedures than to examine their philosophical basis. However, a basic understanding of the method's philosophical perspective can be useful for guiding the researcher in the inevitable process of making decisions about their study. Decisions such as selection of sample, data collection method and criteria for ensuring quality should be guided by these philosophical principles. In the second half of this paper, two IPA studies are discussed in depth, so that the reader can see how these decisions manifest themselves in practice.

IPA procedures are designed to provide detailed guidance, but also to allow for flexibility. Although a number of papers have outlined procedures of an IPA study, such as Smith *et al.* (1999), Smith and Osborn (2008), and Willig (2001), the most complete guide is Smith *et al.* (2009). One of the characteristics of IPA as a method is that attention has been paid to clearly detailed procedures. In qualitative research, moving from data to themes can feel uncomfortably subjective, but IPA procedures offer a detailed multi-stage process to guide the analysis. As Brocki and Wearden (2006) noted "IPA theorists have tended to use easily comprehensible language and straightforward guidelines, rather than using language to obscure meaning in the way that other qualitative methodologies might be criticised for" (p. 101).

It is interesting that the procedures emphasize rigor, as well as a creative aspect to the work. Smith *et al.* (2009) stated that "successful analyses require the systemic application of ideas, and methodical rigour; but they also require imagination, playfulness, and a combination of reflective, critical and conceptual thinking" (p. 40). In his introductory presentation, Larkin (2011) describes the experience of doing IPA research as "intuitive," "systematic," "laborious," "creative," "intense," and "conceptually-demanding." Smith (2011) claims that the two key measures of quality for IPA studies are "rigour" and "interpretative flair" (p. 23). Overall, in describing the method, there seems to be a balance between the intuition and creativity needed to see patterns and connections and the rigorous and systematic effort needed to produce credible research.

Expansion of IPA into LIS

IPA is increasingly being used for research outside health psychology (Smith, 2011, p. 13), but is still rarely used in LIS. Seven studies have used IPA to explore information and technology related experience among LIS professionals and/or users. Two of these studies will be discussed in depth to illustrate methodological issues and choices in conducting an IPA study.

Scholars in the health sciences have used IPA to explore the information experience of patients, specifically the information seeking experience of patients with motor neuron disease (O'Brien, 2004) and the experience of using information sources for patients with arthritis (Powell *et al.*, 2009). These studies demonstrate the usefulness of IPA for studying information seeking and use. It is important to note the specificity of the groups of patients in these two studies. Because of the focus on individual experience, IPA might be particularly useful in the study of information seeking and use for minority groups or under-served users, whose experience could be different from the majority, but also different from others in their group.

Three studies have focussed on the experience of technologies or virtual environments. Ní Chonchúir and McCarthy (2008) studied the experience of "enchantment" with technology. The authors argued that their study demonstrates the importance of studying the individual experience in human computer interaction research. Hadert and Rodham (2008) studied use of an online message board by arthritis patients. Although the focus of their study was not specifically information use, one of the themes that emerged was "information exchange," and their implications focus on improving health care professionals' understanding of patients' information use. Chesney *et al.* (2009) studied the phenomenon of "griefing," or harassment in virtual worlds, including the nature of griefing, griefer motivation, shared responsibility to control, and the relationship between real life and Second Life (pp. 538-541). These studies demonstrate the usefulness of IPA in understanding users' experiences with technology, going beyond simply how they use it. IPA could be useful in exploring the experience of emerging technologies, such as reading via electronic books, learning in the massive open online course environment, or receiving health care online.

The two examples that will be examined in detail in the next section focus on the lived experience of LIS professionals, specifically the experience of reference and information service (RIS) for academic research librarians and the experience of burnout for information and computer technology (ICT) professionals.

Application of IPA to two research questions in LIS

This section of the paper discusses how IPA was applied in the investigation of two problems in LIS. This in-depth discussion of the application of the method explores some methodological issues and may raise ideas for its further use in LIS. VanScoy (2013) studied the experience of RIS for eight professionals working in academic research libraries in the USA. RIS has historically been studied from a behavioral perspective, leaving a gap in understanding about the phenomenon from the practitioner perspective. The aim of this study was to contribute the voice of the practitioner to current research on RIS. Thus, a phenomenological approach was needed. However, phenomenological approaches can be focussed on revealing the "essence" of a phenomenon, or that which is common to all participants' experience. IPA was specifically chosen because of its focus on the idiographic and its goal to reveal divergence, as well as convergence of experience.

Another application of IPA is Evenstad's (2011) study of the experience of burnout among three ICT workers in Norway. The aim of this study was to bring insight into the burnout process as experienced by employees in the ICT sector. As a qualitative approach, phenomenological research was chosen to focus on the experience of the phenomenon and IPA was chosen due to its unique interpretative and idiographic aspect. The emphasis on the researcher's own experience with the phenomenon and his or her interpretative role was the main reason for choosing IPA rather than transcendental phenomenology of Moustakas.

Selection of research participants

In IPA studies, selection of research participants tends to be purposive and broadly homogenous as a small sample size can provide a sufficient perspective given adequate contextualization. In this respect, IPA differs from other methodologies, such as grounded theory, as in IPA the aim is to select participants in order to illuminate a particular research question, and to develop a full and interesting interpretation of the

data. Grounded theory, on the other hand, uses theoretical sampling, which aims to keep collecting data in the light of the analysis that has already taken place, until no new themes are emerging. Thus, while grounded theory seeks to establish claims for the broader population, IPA studies tend to be more concerned with examining divergence and convergence in smaller samples.

Brocki and Wearden (2006) found that "sample" sizes for IPA studies ranged from 1 to 30 participants (p. 94). Smith *et al.* (2009) argued that "it is important not to see the higher numbers as being indicative of 'better' work […] Successful analysis requires time, reflection and dialogue, and larger datasets tend to inhibit all of these things" (p. 52). The research participants in the VanScoy study consisted of eight librarians, three women and five men. The research participants in the Evenstad study consisted of two women and one man, all of whom had experienced burnout in the past.

Another important characteristic of IPA is that participants should consist of a homogenous group. Rather than being representative of the population and including all perspectives, the sample should explore the perspective of a group with similar characteristics or within a similar context. In the Evenstad study, all participants had been diagnosed with burnout by their physician. In addition, they had important experiences and characteristics in common, including recurrence of burnout after returning to work, challenges in the family sphere, a shorter practical ICT education, choice of ICT profession out of economical considerations, and broad work experience in the ICT profession.

In the VanScoy study, homogeneity was attempted by including librarians who worked in a specific library context (academic research libraries), who had at least two years of professional experience with RIS, who self-identified as "actively engaged in reference work," and who held typical academic library reference positions, as opposed to management and instruction coordinator positions. However, the results of the study suggested that the users with whom the librarian worked were significant to the experience, so perhaps subject liaison responsibilities should be considered as a factor in homogeneity in the future. In medical or psychological research, homogeneity is generally achieved by selecting participants who have been diagnosed with a disease or who have particular symptoms, as it was in the Evenstad study. It is possible that homogeneity may be harder to define in LIS than in health psychology.

An issue in the Evenstad study, however, is a common one among qualitative studies: accessing these participants was difficult since burnout is a taboo subject and participants are reluctant to openly volunteer. After announcements in the labor unions' web sites guaranteed full anonymity, seven persons expressed interest and three were chosen to be the purposive sample for this study.

Semi-structured interviews
The main method to collect data in IPA studies is semi-structured interviews (Smith *et al.*, 2009, p. 56). Brocki and Wearden (2006) noted that some other methods are occasionally used, such as diaries, field notes, and e-mail interviews (pp. 92-94); however, the vast majority of IPA studies rely on data from in-person interviews. The choice of semi-structured interviews as the sole source of data for the study reflects IPA's value on the participant's interpretation of the phenomenon under study. As Smith *et al.* (2009) explained, "participants should have been granted an opportunity to tell their stories, to speak freely and reflectively, and to develop their ideas and express their concerns at some length" (p. 56).

IPA interviews center on a set of particular questions but allow for flexibility in following up on points raised in responses to the given questions. Smith *et al.* (2009) recommended six to ten open-ended questions that include a variety of types: narrative, descriptive, structural, contrast, evaluative, circular, and comparative (p. 58). The interview schedule should be used flexibly to allow for unanticipated information to emerge.

Semi-structured interviews were used for data collection in both the VanScoy study and the Evenstad study. For the VanScoy study, an interview schedule of eight questions and possible prompts was developed using the guidelines mentioned above. Two interviews of between 30 and 75 minutes were conducted with each participant. Multiple interviews provided greater opportunity for development of rapport and trust. It gave participants the opportunity to reflect on the topic over time which occasionally resulted in additional insights. It also allowed the author to recover from missed opportunities to probe interesting statements when they were first mentioned. The interviews were recorded and transcribed by a transcription service.

The Evenstad study also used semi-structured interviews with each participant. However, due to the sensitivity of the phenomenon, the researcher made initial telephone calls to establish rapport and to self-disclose her background in ICT and her experience of burnout. In addition, a theme list was e-mailed to participants before the interviews. The interviews were 90 to 120 minutes long. They were recorded and transcribed by the researcher. The transcriptions were sent to participants for verification, and participants were invited to contribute additional thoughts and reflections. During the interviews, participants were urged to speak freely and were referred to the theme list that had been e-mailed to them prior to the interview. Examples of themes from this list are "symptoms experienced before, during and after burnout," "stress factors prior to burnout" and "description of the state of burnout." Thus, the interviews were semi-structured and were very much led by the participants. Smith *et al.* (2009) suggests that "the interview will in part be led by the participant's concerns and that the interviewer will follow up matters arising" (p. 58). Open questions are extremely useful to discover aspects of the phenomenon that have escaped the attention of the quantitative research in this field. For instance, it was discovered that the participants experienced shame over having been burned out.

Variations on the analysis process
IPA procedures are detailed and guide the research through the stages of analysis. However, in practice there is variation in the execution of the procedures for an individual study. The following section provides examples of the various stages of analysis from the VanScoy and Evenstad studies to illustrate this variation.

IPA data analysis is a multi-stage process of generating themes from the data. IPA is said to be "bottom-up," meaning that the researcher generates codes from the data, rather than using an already existing theory to identify codes that can be applied to collected data. Focussing on one participant's data at a time, analysis moves from the descriptive to the interpretative by capturing initial thoughts, generating tentative themes, and then refining these themes. This process proceeds from exploratory comments to emergent themes to super-ordinate themes for each participant, then to master themes for the group.

To prepare for the initial stage of analysis, data is transcribed and typically presented as the central column of a theme development sheet. The statements can be

numbered line by line to ease referral later. Despite this standard format, the look and feel of a theme development sheet can vary. Figure 1 shows a sample page from a completed theme development sheet from the VanScoy study, and Figure 2 shows a sample portion of a theme development sheet from the Evenstad study.

After engaging with the data by listening to the interview recording and reading the transcript several times, exploratory comments are noted in the right-hand column of the coding sheet near the related data. The two studies illustrate different approaches to generating exploratory comments. In the VanScoy study, the exploratory comments were of three different types: descriptive (describing the content of the data and indicated with a "D" in Figure 1), linguistic (noting the language used by the participant and indicated with an "L" in Figure 1), and conceptual (researcher questions or thoughts about the data, indicated with a "C" in Figure 1). In the example from the Evenstad study (see Figure 2), data that the author felt was significant was highlighted and then exploratory comments were written in the right-hand column.

The next stage of analysis involves developing emergent themes by examination of the exploratory comments along with the data. These emergent themes are generated by looking for "interrelationships, connections and patterns" (Smith *et al.*, 2009, p. 91). Emergent themes reflect what is important to the participant, rather than what is of interest to the researcher (Larkin *et al.*, 2006, p. 111). They are typically written in the left-hand column of the form near the original data and the comments that inspired them. Emergent themes can be seen in the left-hand columns of both Figures 1 and Figure 2.

In the next stage of analysis, emergent themes from each individual case are analyzed to identify clusters of related themes, called super-ordinate themes. This analysis consists of grouping and regrouping the emergent themes for an individual participant to identify and organize connections between the themes.

In the VanScoy study, participants had between 4 and 11 super-ordinate themes, with some super-ordinate themes having subthemes, as well. A super-ordinate theme table was created for each participant, listing the super-ordinate themes, the corresponding emergent themes, key phrases from the data that provide evidence for each theme, and a page number for the location of the key phrase on the participant's theme development sheet. Table I shows a portion of a super-ordinate theme table for one of the participants in the VanScoy study. In the Evenstad study, initially there were up to five super-ordinate themes per participant with 3 to 12 subthemes under super-ordinate themes. For example, in Figure 3 the super-ordinate theme "symptoms" contains a subtheme "psychological symptoms" which is a grouping of several elements that emerged on the left-hand column. This process was repeated for each participant on a separate spreadsheet. This process of analyzing each participant's data separately, before analyzing the group overall, illustrates IPA's focus on the idiographic and its contrast with phenomenography.

Following development of super-ordinate themes for each participant, the final stage of analysis begins: development of master themes for the group. The tables of super-ordinate themes for each participant are compared to generate master themes, identifying higher order qualities, as well as unique characteristics. This process involves looking for patterns across cases and asking the questions: "What connections are there across cases? How does a theme in one case help illuminate a different case? Which themes are the most potent?" (Smith *et al.*, 2009, p. 101). The master themes are presented in a table showing the hierarchy of master and super-ordinate themes and are explained in a narrative along with evidence from each participant's data.

Emergent Themes	Interview Data	Exploratory Comments
use of jargon	even in an electronic environment, you're still looking for different access points and different cataloging and you know, just the slightest variation sometimes, you know, in, in what's in a full record, and	(L) use of jargon (D) his strategies don't always work
frustration	sometimes a full record isn't a full record, you know, and it's really frustrating. Or I'll do a keyword search in our catalog and I pull up something, and I can't find	(L) emotional language
infuriating	a keyword and a record and that just infuriates me. Uh, you know, that kind of thing, but, I'm sorry, I'm	(L) Despite long tangents, he always comes right back to the topic without prompting from me
importance of the reference interview	kind of getting off from the question. Um, but well [...] talking about the reference interview I guess, um, it, so it really is crucial, and hopefully your experience of	(D) years of experience should make you better at the work (L) "crucial" (D) sometimes years of experience interfere
impact of experience	years that you bring to bear helps you with it. Of	(C) the patterns of behavior can make it hard to see the obvious, easy way – I've read about these professional ruts
impact of experience	course sometimes it hinders you. You know, and sometimes the student who's Googling away right beside you where you're in a bona fide index is	(L) image of a race or contest with the user (C) Is it competitive? It's a loss of face if the user finds the answer first. But he insists that as long as the answer is found, it's OK.
humbling	finding stuff that you're not finding. And that's humbling, but, you know, uh, you take the answer wherever you get it. When a student finds it, you don't – good for the student. You know, I mean, that,	(L) more use of words like "humbling" and "pride" in association with finding or not finding an answer
expectations for self	you want to have some pride, but by the same token, you want to find the damn answer, so. Uh, but, but I	(C) here finding the answer seems to be the most important goal, regardless of how it's found
pride in work	think, and it's hard, you can kind of teach it, but I	(D) reference work can only "kind of" be taught
importance of finding the answer	mean, you know, it's public service, and it's reading	
reading the user	the person and it's, you know, whether they're distrustful of you or whether they're trying to, you	
user interference	know, they always say, you know, they're trying to ask you what you want to give them kind of thing. And um, and so it's [...] you know, you want to, to ask	(D) user can sometimes be deceitful or at least unhelpful in communicating question
reference interview differs by user type	them as intelligently as you can, um, but it also depends on who you're talking to. You know, is it a freshman who has no bibliographic reference whatsoever, or is it a, you know, a faculty member whose been doing it for, you know, thirty years and is	(D) can challenge an undergrad, but must be diplomatic with faculty (C) so user status affects service (D) starts an example of when he didn't take a question seriously enough

Figure 1.
Sample from a theme development sheet from the VanScoy study

Figure 2.
Sample from a theme
development sheet
from the Evenstad
study

In the VanScoy study, the process of grouping super-ordinate themes resulted in five master themes, each with several subthemes that help convey aspects of each master theme (see Table II). In the Evenstad study, looking for patterns, similarities and differences across the super-ordinate theme tables resulted in adjustments to the theme structure, in particular, adding an additional level. A master table with this three-level structure was created with a column for each participant and their significant statements with reference to line numbers in the transcripts (see Figure 4). Finally, this master theme table was reduced to a brief master table with two levels, master themes and subthemes (see Table III).

One challenge to the adoption of IPA for LIS research is the lack of software designed specifically for IPA analysis. In a field like LIS where researchers clearly recognize and depend on information and communication technology to improve efficiency, this lack of specialized software may be a deterrent. Although word processing, spreadsheet, and concept mapping software can be useful, these tools do not provide much support for analysis. Some researchers have tried to adapt existing qualitative analysis software to IPA procedures. However, IPA's multi-stage analysis process does not fit neatly into software designed for the coding and memo-ing process typical of grounded theory research.

In the VanScoy study, the emergent themes from a participant's theme development sheet were recopied onto sticky notes which were grouped and regrouped on large sheets of flipchart paper. Other studies have employed a similar physical process using slips of paper arranged on a tabletop. The physical manipulation of emergent themes stimulated creative thinking and allowed for themes to be easily considered in relation to other themes, but it was inefficient. Writing and rekeying themes was not a productive use of time and retrieving examples of participants' words from the data were cumbersome.

In the Evenstad study, a participant's emergent themes were copied into a spreadsheet and sorted alphabetically. Duplicates were deleted, but the number of occurrences of a particular emergent theme was indicated in brackets, giving important information as to how much a participant emphasized a point. Different colors were used to code the various emergent themes, clustering the emergent themes into higher level super-ordinate themes (see Figure 3). This use of spreadsheets and word

Emergent themes	Page	Data supporting the theme
Continuous learning	14	"professional mandate, to keep on learning […] to equip ourselves to help"
Librarian learning	19	"I am a learner in the process. I learn stuff."
Learning from other librarians	19	"I from my colleagues during conversations […] by reading some of the chat transcripts"
Learning from other librarians	19	"I learn how my colleagues respond to questions […] what they learned and how they helped"
Learning from users	20	"getting user feedback, not only to develop ourselves as professionals, but also for them"
Informal surveying of users	20	"I utilize my interactions to ask some […] open ended questions"
Takes opportunities to learn	23	"it's an opportunity for me to learn"
Reflection	30	"helped me to think about some of my work in a different manner"

Table I.
Sample of a super-ordinate theme table for the super-ordinate theme "librarian as learner" from the VanScoy study

Figure 3.
Table of super-
ordinate themes from
the Evenstad study

Master themes	Subthemes
Importance of the user	Focus on the user
	Connection and relationships
	Influence and power of the user
	Managing user feelings and expectations
Variety and uncertainty	Varied users and contexts
	Multiple purposes for the interaction
Fully engaged practice	Effort and persistence
	Immersion in an individual interaction
	Intuition and "reading the user"
Emotional connection	"Joy of helping"
	Delight in the intellectual challenge
	Anger, frustration and embarrassment
	Nature of failure
Sense of self as reference professional	Professional identity
	Power of experience
	Changes in the experience over time

Table II.
Master themes and subthemes from the VanScoy study

processing documents was effective for sorting emergent themes, removing duplicates, using colors for easy coding, as well as inserting sub-levels and super levels. The write-up was also facilitated by copying and pasting from transcripts into tables. Thus, the semi-automatic method facilitated the process, and in addition, contributed to transparency with an audit trail.

With a time-intensive method like IPA, unnecessary inefficiencies must be avoided to make the method viable. As the number of researchers using IPA grows, there may be interest in developing specialized software to support the method.

Writing the IPA narrative
The results section of an IPA write-up is considerably long and discursive, and supplies ample evidence for the themes that are identified per case. There are substantial extracts from the transcript, as well as interpretations of the data. IPA provides considerable flexibility in presenting the results and narratives will vary depending on the researcher and the data collected. It is possible to present themes within a case or cases within a theme. In the discussion section the researcher engages in a dialogue between the findings and the existing literature. However, experienced IPA researchers may merge these and relate themes to the existing literature in the write-up.

In the VanScoy study, both results and discussion were presented by theme and subtheme. Efforts were made to support each theme and subtheme with evidence from each participant. One challenge for reporting IPA research is the limited length of journal articles. With five themes and eight participants in the VanScoy study, it was impossible to adequately describe and provide evidence for each theme and subtheme. To address this problem, two of the five themes from the study were reported in detail when the study was published. These two themes represented concepts that had not been previously discussed as components of RIS.

In the Evenstad study, each theme was presented in sequence and supported by evidence from each case. These findings were then discussed in relation to the existing literature.

352

Master theme	Tina	Therese	Fredrik
Veien til utbrenthet	Må levere hele tiden	Uriasposten	Hattefabrikken
Personlige faktorer			
Yrkesvalg — IKT ikke drømmeyrke	Veldig tidlig ønsket jeg å bli lege. Jeg kommer fra en arbeiderfamilie. Pappa sa "ingen i fapilien vår er lege; du kan ikke bli det". (20-21) Så jeg kom inn i på Ing.høyskolen. Jeg følte meg definitivt ikke hjemme altså. Jeg tenkte kort utdannelse, godt betalt, ingen helgejobb, en grei start, en grei plattform og (29-32).	...var med på denne store slankingen, omorganiseringen osv. I den forbindelse så fikk vi tilbud om utdanning med halvlønn og det var en gullkantet avtale, hadde full lønn faktisk. Så hev jeg meg på den bølgen da. Tok forkurs i ing. høyskolen innenfor IT (5-9)	Egentlig var det en tilfeldighet (6) Jeg så annonse fra Næringsakademiet da, ettårig IT-studie. Ja, tenkte det er sikkert noe....som sagt det er gadgets og synes det er moro å drive med sånne ting og gikk ett år der (20-22).
Livssituasjon	Jeg hadde skillsmisse og jeg hadde små barn.... fikk jeg hovedomsorgen (115-116). Overtok et hus og noen millioner i gjeld. Jeg skulle mestre alt. Ja, jeg måtte sette grenser overfor eksmannen min og (428-429) jeg hadde konflikter med eksmannen	(Skillsmissen) Det var lettere sagt. Jeg var arbeidsledig hele det første året (13) ...da jobbet jeg litt på fiskebu og det jeg kunne for jeg måtte jo ha penger, ja (16) ...fikk vikariat litt her og litt der (19) Det har jo også vært en del	(Fra å være jungkar og ingen barn til å bli samboer, skal gifte meg til sommeren for så vidt med en ung dame som har tre barn fra før ...og ingen av de er mine....Ehh, det har bragt med seg utfordringer det og (73-76)

Theme

Line number

Sub-theme

Source: Evenstad study

Figure 4.
Master themes
and subthemes by
participant
with examples from
the data

Ensuring quality
One of the benefits of the growing literature surrounding IPA is its contribution to discussions of assessing quality in qualitative research. There can be a tendency for researchers to view quality criteria as stable and universal and to take a checklist approach to ensuring a quality study. IPA procedures discourage the use of traditional measures of quality that may not be consistent with IPA's philosophical basis. For example, using observation for triangulation of data may not be appropriate for an IPA study because it does not reveal the participant's interpretation of the phenomenon.

Smith *et al.* (2009) recommend criteria developed by Yardley (2000). Yardley's criteria are "sensitivity to context," "commitment and rigour," "transparency and coherence," and "importance and impact" (p. 219). Although these criteria are broad, they are suitable for any qualitative method. And perhaps more significantly, they force the researcher to reflect about the best strategies for ensuring quality for his or her study.

In addition to Yardley's general quality criteria, Smith (2011) has developed specific measures of quality for IPA. Intended to be used in conjunction with Yardley's general criteria, these specific criteria were developed based on exemplary IPA studies. Smith's criteria for exemplary IPA studies are a clear focus, strong data (resulting from good interviewing), support for themes extracted from each participant's data, sufficient elaboration of each theme, interpretative, rather than merely descriptive, analysis includes patterns of similarity as well as uniqueness, and paper carefully written (p. 24). Although some of these criteria, such as "clear focus" and a well-written paper are common to any type of research, others criteria are specific to IPA studies, such as the emphasis of interpretation over description and "patterns of similarity as well as uniqueness."

Another recommendation for ensuring quality is maintaining an audit trail, including a research log detailing decisions made during the research process and reflexive comments. Researchers may choose to go beyond maintaining the audit trail to pursuing an independent audit of the research. The independent audit ensures that credible conclusions are being drawn from the data and that procedures are being followed to ensure a quality study. In an independent audit, a researcher not associated with the study, but familiar with IPA procedures, reviews the study documentation including the research log, interview data, coding sheets, tables of super-ordinate themes, and draft report. According to Smith *et al.* (2009), the role of the auditor is "to check that the final report is a plausible or credible one in terms of the data which have been collected and that there is a logical step-by-step path through the chain of

Master themes	Subthemes
A. The road to burnout	
	A.1 Personal factors
	A.2 Work and organizational factors
	A.3 Symptoms
B. Burnout	
	B.1 "The Invisible Wall," "bang" and the experience of illness
	B.2 Treatment and recovery process
C. Life after burnout	
	C.1 To come back and experience reduced engagement
	C.2 Recurrence
	C.3 Defence and coping strategies, and evaluation of career

Table III.
Master themes and subthemes for the Evenstad study

evidence" (p. 183). This procedure differs from inter-rater reliability in that there is no attempt to reach a consensus in interpretation of data. Recognizing the unique interpretation of the individual researcher, the audit is intended to assure consumers of the research that the conclusions were logically derived from the data and that the study is "systematic" and "transparent" (p. 183).

An independent auditor was used in the VanScoy study. A post to the IPA listserv resulted in several recommendations for this an auditor who had experience with the method and had audited other IPA studies. The auditor's feedback was useful to confirm that the research was following procedures and achieving sufficient interpretation, and it lends some credibility to the study. However, maintaining a conscientious and detailed audit trail would have the same result. In the Evenstad study, an independent audit was not used; rather, a research log was maintained in Facebook and constantly updated with progress reports. Participants and the researcher's supervisor were kept current in the various stages of the interpretation process and participants validated the verbatim transcriptions, themes, metaphors and write-up. A detailed account of research procedures was reported in the thesis. All stages of analysis were named on the word processing and spreadsheet files and structured in a directory on Evenstad's computer to ease an audit or reference at a later stage.
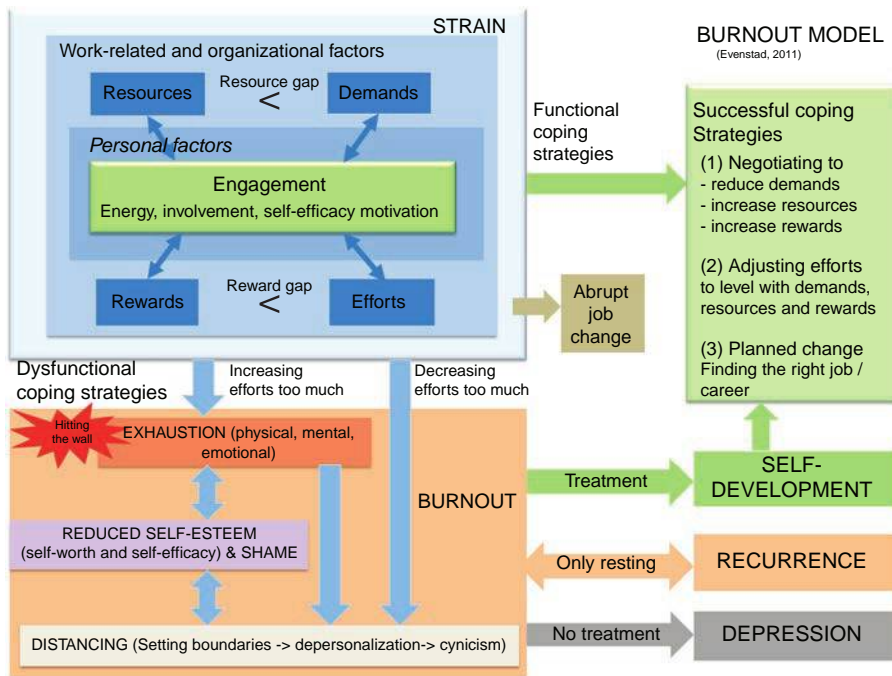
Effectiveness of the method

In both studies IPA was an effective method for exploring the phenomenon under study and for revealing new aspects of the experience. The VanScoy study exposed some aspects of RIS that have not been previously discussed, such as "fully engaged practice" and "emotional connection" (see Table II). Other master themes are known aspects of RIS but some of the subthemes exposed nuances that are not as familiar, such as "influence and power of the user" as an aspect of "importance of the user." Overall, the IPA method allowed new dimensions of the research topic to emerge.

In the Evenstad study, a model for the complete burnout process was proposed (see Figure 5). This model includes new concepts like "resource gap" and "reward gap," incorporates new findings like "shame" and "recurrence" as well as proposing some additions to existing theories and models. Identifying "shame over having burned out" was result of a new iteration in the analysis when looking at differences and commonalities between different dominant feelings. Thus, the in-depth analysis encouraged by the IPA method revealed a new aspect which had not been discovered before. Another iteration of analysis was conducted to identify the metaphors in the data. IPA focusses on analyzing the participants' metaphorical statements since painful life experiences expressed metaphorically in an interview situation can be less difficult for participants. "The metaphor thus functions as a direct sense-making response, to a threat which is experientially real" (Smith *et al.*, 2009, p. 158). Evenstad took the analysis further and used metaphors from the Greek mythology, for instance Sisyphus task to interpret the participants' experiences and shared these metaphors with the participants who found that they accurately captured their burnout experience. The openness to creativity afforded by the IPA method made it possible to express a participant's experience of stressful work situation prior to burnout by a metaphor.

Conclusion

IPA offers an addition to the repertoire of phenomenological methods for LIS research. Three distinguishing features of IPA – its focus on diversity, as well as commonality,

Figure 5.
New burnout model
including new
dimensions as a
result of using IPA

Source: Evenstad study

of experience, its clearly detailed procedures that step the researcher from one level of analysis to the next, and its focus on incorporating the researcher's past experience – recommend it as a contribution to existing methods. IPA is beginning to generate interest among researchers in LIS. The two studies explored in-depth in this discussion demonstrate that IPA is effective for studying phenomena that LIS professionals experience in their work, whether it is their experiences while doing their job or their experiences as a result of doing their job. The detailed, yet flexible procedures were one advantage of this method. Although there are challenges for using IPA in LIS, they are not insurmountable and may be ameliorated by further use of the method in our discipline. More studies using IPA in LIS research could lead to ways that it may need to be adapted and will strengthen the community of IPA experts in LIS. Phenomenology is an important approach for LIS, and the field may discover that IPA is a powerful new method to pursue it.

References

Brocki, J.M. and Wearden, A.J. (2006), "A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology", *Psychology & Health*, Vol. 21 No. 1, pp. 87-108.

Bruce, C. (1997), *The Seven Faces of Information Literacy*, Auslib Press, Adelaide.

Budd, J.M. (1995), "An epistemological foundation for library and information science", *Library Quarterly*, Vol. 65 No. 3, pp. 295-318.

Budd, J.M. (2005), "Phenomenology and information studies", *Journal of Documentation*, Vol. 61 No. 1, pp. 44-59.

Budd, J.M., Hill, H. and Shannon, B. (2010), "Inquiring into the real: a realist phenomenological approach", *Library Quarterly*, Vol. 80 No. 3, pp. 267-284.

Chesney, T., Coyne, I., Logan, B. and Madden, N. (2009), "Griefing in virtual worlds: causes, casualties and coping strategies", *Information Systems Journal*, Vol. 19 No. 6, pp. 525-548.

Dalbello, M. (2005a), "A phenomenological study of an emergent national digital library, part I: theory and methodological framework", *Library Quarterly*, Vol. 75 No. 4, pp. 391-420.

Dalbello, M. (2005b), "A phenomenological study of an emergent national digital library, part II: the narratives of development", *Library Quarterly*, Vol. 75 No. 4, pp. e28-e70.

Dahlberg, K., Dahlberg, H. and Nyström, M. (2008), *Reflective Lifeworld Research*, 2nd ed., Studentlitteratur, Lund.

Evenstad, S.B.N. (2011), "Skal levere hele tiden. Det tar på !En fortolkende fenomenologisk undersøkelse (IPA) av utbrenthet blant tre IKT-ansatte i Norge", masters thesis, Norges Teknisk-Naturvitenskapelige Universitet, Trondheim.

Fade, S. (2004), "Using interpretative phenomenological analysis for public health nutrition and dietetic research: a practical guide", *Proceedings of the Nutrition Society*, Vol. 63 No. 4, pp. 647-653.

Giorgi, A. (Ed.) (1985), *Phenomenological and Psychological Research*, Duquesne University Press, Pittsburgh, PA.

Hadert, A. and Rodham, K. (2008), "The invisible reality of arthritis: a qualitative analysis of an online message board", *Musculoskeletal Care*, Vol. 6 No. 3, pp. 181-196.

Heidegger, M. (1962), *Being and Time* (Trans by J. Macquarie and E. Robinson), Harper & Row, New York, NY.

Husserl, E. (1970), *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy* (Trans by D. Carr) Northwestern University Press, Evanston.

Introna, L.D. and Ilharco, F.M. (2004), "The ontological screening of contemporary life: a phenomenological analysis of screens", *European Journal of Information Systems*, Vol. 13 No. 3, pp. 221-234.

Kirk, J. (2002), "Theorising information use: managers and their work", doctoral dissertation, University of Technology, Sydney.

Kupers, W. (2005), "Phenomenology of embodied implicit and narrative knowing", *Journal of Knowledge Management*, Vol. 9 No. 6, pp. 114-133.

Larkin, M. (2011), "Interpretative phenomenological analysis – introduction", available at: http://prezi.com/dnprvc2nohjt/interpretative-phenomenological-analysis-introduction/ (accessed September 10, 2013).

Larkin, M., Watts, S. and Clifton, E. (2006), "Giving voice and making sense in interpretative phenomenological analysis", *Qualitative Research in Psychology*, Vol. 3 No. 2, pp. 102-120.

Limberg, L. (1999), "Experiencing information seeking and learning", *Information Research*, Vol. 5 No. 1, available at: http://informationr.net.gate.lib.buffalo.edu/ir/5-1/paper68.html

Limberg, L. (2000), "Phenomenography: a relationship approach to research on information needs, seeking and use", *The New Review of Information Behavior Research*, Vol. 1, pp. 51-67.

Limberg, L. and Alexandersson, M. (2003), "The school library as a space for learning", *School Libraries Worldwide*, Vol. 9 No. 1, pp. 1-15.

Moustakas, C. (1994), *Phenomenological Research Methods*, Sage Publications, Thousand Oaks, CA.

Ní Chonchúir, M. and McCarthy, J. (2008), "The enchanting potential of technology: a dialogical case study of enchantment and the internet", *Personal and Ubiquitous Computing*, Vol. 12 No. 5, pp. 401-409.

O'Brien, M.R. (2004), "Information-seeking behaviour among people with motor neurone disease", *British Journal of Nursing*, Vol. 13 No. 16, pp. 964-968.

Powell, R., McKee, L. and Bruce, J. (2009), "Information and behavioural instruction along the health-care pathway: the perspective of people undergoing hernia repair surgery and the role of formal and informal information sources", *Health Expectations*, Vol. 12 No. 2, pp. 149-159.

Savolainen, R. (2008), *Everyday Information Practices: A Sociological Perspective*, Scarecrow Press, Lanham, MD.

Smith, J.A. (1996), "Beyond the divide between cognition and discourse: using interpretative phenomenological analysis in health psychology", *Psychology and Health*, Vol. 11 No. 2, pp. 261-271.

Smith, J.A. (2004), "Reflecting on the development of interpretative phenomenological analysis and its contribution to qualitative research in psychology", *Qualitative Research in Psychology*, Vol. 1 No. 1, pp. 39-54.

Smith, J.A. (2007), "Hermeneutics, human sciences and health: linking theory and practice", *International Journal of Qualitative Studies on Health and Well-being*, Vol. 2 No. 1, pp. 3-11.

Smith, J.A. (2011), "Evaluating the contribution of interpretative phenomenological analysis: a reply to the commentaries and further development of criteria", *Health Psychology Review*, Vol. 5 No. 1, pp. 55-61.

Smith, J.A. and Osborn, M. (2008), "Interpretative phenomenological analysis", in Smith, J.A. (Ed.), *Qualitative Analysis: A Practical Guide to Research Methods*, Sage, Thousand Oaks, CA, pp. 53-80.

Smith, J.A., Jarman, M. and Osborn, M. (1999), "Doing interpretative phenomenological analysis", in Murray, M. and Chamberlain, K. (Eds), *Qualitative Health Psychology: Theories and Methods*, Sage, London, pp. 218-240.

Smith, J.A., Flowers, P. and Larkin, M. (2009), *Interpretative Phenomenological Analysis: Theory, Method and Research*, Sage, Los Angeles, CA.

VanScoy, A. (2013), "Fully engaged practice and emotional connection: aspects of the practitioner perspective of reference and information service", *Library & Information Science Research*, Vol. 35 No. 4, pp. 272-278.

Willig, C. (2001), *Introducing Qualitative Research in Psychology*, Open University Press, Buckingham.

Wilson, T.D. (2003), "Philosophical foundations and research relevance: issues for information research", *Journal of Information Science*, Vol. 29 No. 6, pp. 445-452.

Yardley, L. (2000), "Dilemmas in qualitative health research", *Psychology and Health*, Vol. 15 No. 2, pp. 215-228.

Further reading

Golsworthy, R. and Coyle, A. (1999), "Spiritual beliefs and the search for meaning among older adults following partner loss", *Mortality*, Vol. 4 No. 1, pp. 21-40.

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357

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