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A Case Study of a Practitioner Researcher in Information Systems Development

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Abstract

Many key contributions to research in information systems development (ISD) have been made by practitioners. This exploratory study aims to advance the knowledge about practitioner researchers, which can help improve the cooperation between academics and practitioners in ISD research. Adopting a qualitative research strategy an exploratory case study of a practitioner researcher is carried out. The data is collected through an in-depth interview and a sample of refereed publications. The study shows that practitioner research is not limited to experience papers but includes theoretical contributions as well. Writing papers is how the practitioner researcher in the study reflects on his professional practice, and in this sense he writes them for himself. This may explain why he prefers theoretical papers, shows little interest in experience reports, does not document systematic data collection, and does not emphasise reflexivity in his papers.

Keywords: practitioner research, collaborative research, relevance

1.0 Introduction

Many key contributions to theory and practice in IT-related fields have been made by practitioners (Davenport and Markus 1999). In IS development (ISD) practitioners like Barry Boehm, Grady Booch and the group of consultants who published the 'Manifesto for Agile Software Development' have made very important research contributions (Pressman 2005).

At the same time there are increasing doubts about the relevance of academic research to practice and concerns about a growing theory/practice gap in IS and SE. To address these problems it is often suggested to involve practitioners and industry more in research and to emphasise corresponding research approaches, e.g., action research and collaborative research (Benbasat and Zmud 1999; Dybå and Dingsøy 2008; Rosemann and Vessey 2008).

Special conference tracks like 'Software Engineering in Practice' at ICSE 2009 are another important initiative to encourage participation of practitioners in research (ICSE 2009).

While practitioner researchers and their publications are an important phenomenon in ISD, they have not been studied systematically yet. This would be useful, though,

because practitioner researchers significantly differ from academics (Coghlan and Brannick 2005; Fox et al. 2007; Jarvis 1999).

This paper reports the results of an MBA research project. The aim of that study is to provide insight into the nature of practitioner research in ISD. Because of its exploratory nature, a qualitative research strategy is adopted and a case study of a practitioner researcher in ISD is used. The data was collected through an in-depth interview with a practitioner and from a sample of his refereed publications.

For ethical reasons the practitioner's identity cannot be revealed, and the pseudonym 'C' (for 'Consultant') will be frequently used in the following text.

It is useful to know some context information: C is male and has been working as an ISD consultant in the past 30 years and held a number of positions in industry. During that period he has published a number of textbooks, refereed papers and unrefereed contributions. The refereed papers were published by conferences and journals that appeal to academic and industry audiences, and some of these papers were co-authored with other practitioners or full-time academics. Apart from a short, part-time engagement as visiting professor C has never held positions at universities.

The exploratory character of the study is reflected in four broad research questions:

1. What has motivated C to publish research papers?
2. How does a 'good' practitioner research paper look like?
3. How does C see the relationship between research and practice?
4. What experiences has C made with collaborative research?

The focus of this paper is on published practitioner research. The term is used in the sense that a professional performs activities that produce knowledge about ISD and that he/she writes and submits a corresponding paper that is accepted by a refereed journal or conference. It is important to note that the focus here is on papers and not on textbooks, as textbooks are not usually used to publish original research.

This study does not have the aim to define what research or theory is or is not (cf. Sutton and Staw 1995; Weick 1995). Instead, in this study we use a simple heuristic and assume that knowledge is generated if two conditions are both met: First, the practitioner thinks that he has discovered something that might interest others and writes a paper on it that is submitted to a research conference or journal. Second, the paper is reviewed and accepted for publication by the conference or journal.

The presentation in this paper continues with a literature review (section 2), an overview of the research design and method used (section 3). This is followed by a

presentation of the main themes and findings (section 4), which are interpreted and discussed (section 5), and the presentation ends with the conclusions and implications (section 6).

2.0 Literature Review

The literature review presented in this section is subdivided into four subsections that correspond to the four research questions of the study.

2.1 Motivation to Publish

One way to analyse human motivation is provided by content theories of motivation, for example Maslow's hierarchy of needs. Almost all content theories of work motivation suggest that humans have existential needs, social needs and growth needs to some degree, that they seek to satisfy. The satisfaction of needs is achieved through rewards. Three kinds of rewards can be distinguished: extrinsic, intrinsic and social (Rollinson 2005).

Extrinsic rewards are tangible benefits that are conferred from outside the individual, for example pay. Much of the literature links the motivation to publish to extrinsic rewards. Typical benefits quoted are professional publicity and a credible claim to expertise which facilitates the marketing and selling of professional services (Johnson 2008; Jones 2003; Patrick 2006; Satterfield 2004; Weiss 2002). It is noteworthy that most of these authors refer to books in the first place, while publications in research journals are rarely mentioned.

Intrinsic rewards are intangible, psychological and inside-orientated, as Rollinson (2005, p. 191) writes: 'These rewards come from inside the person and are given by people to themselves.' If an intrinsic reward results from an activity, it means that the reward is experienced while and because the activity is performed. Friesen (2003) refers to this kind of motivation suggesting that one benefit of publishing is satisfaction gained from the opportunity to think through a topic in depth and achieve new insights. Similar result are reported in Jindal-Snape and Snape (2006) which points to the curiosity of scientists as a major motivating factor and Latham and Pindler's (2005) review which shows that a significant body of research indicates that a natural human need for achievement and growth exists and contributes to

motivation. Another reason why publishing may be attractive to practitioners is that it is different from their routine work and challenging (Hall et al. 2008).

Social rewards are intangible, psychological rewards that are given by another person (Rollinson 2005). An activity produces a social reward, if the activity causes significant social interaction that satisfies social needs. One form of social rewards is peer recognition (Latham and Pindler 2005). Publications by a practitioner can naturally lead to such social rewards, for example through exchanges with researchers or professionals, presentations at conferences, etc.

2.2 Writing Papers

Many experts share the opinion that in order to write a good research paper, an author needs to have a clear idea of the intended target audience (Erdogmus 2007; Fox et al. 2007; McConnell 2002). The importance of this is illustrated by studies which identify and explain a number of differences between the preferences of academics and practitioners regarding management research articles (Baldrige et al. 2004; Davenport and Markus 1999; Kelemen and Bansal 2002). As a consequence the quality of a research publication is not an absolute attribute, instead it should be seen relative to its target audience and how well it satisfies its needs.

There is agreement in the literature that the author of a research paper should also have a clear idea of its purpose (Erdogmus 2007; Fox et al. 2007; McConnell 2002). The purpose of a paper is largely reflected in its 'article genre'. Genres in this sense represent a broad consensus within a research community about the structure, content and communicative purpose of classes of papers, and they signal these expectations to potential readers. In software engineering, for example, a number of genre classifications are in use, which often reflect specific requirements of stakeholder groups (Montesi and Lago 2008).

In the literature a number of basic quality attributes are elaborated that any good paper, regardless of genre or target audience, must satisfy. Typical examples are: clarity, soundness and novelty (Barley 2006; McConnell 2002; Montesi and Lago 2008; Wieringa et al. 2006). There is no consensus about these attributes. Journals and conferences use many different labels for them in their review instructions and often fail to provide detailed definitions, which can make their consistent application difficult for reviewers and authors (Montesi and Lago 2008).

A very different characterisation of a 'good' research paper refers to its dissemination effectiveness, which is often measured by citation counts in academic journals. The likelihood that an article will be cited is dependent on its quality and the journal (Judge et al. 2007). Top journals usually receive more submissions, requiring them to be more selective, thus reducing the likelihood of acceptance (Mingers 2002).

The importance of citation counts for the effective dissemination of practitioner research is questioned by Singh et al. (2007), however, who make the point that actual adoption in practice may be a more appropriate measure of quality in this case.

2.3 Research and Practice

Many commentators recommend that IS and SE researchers should establish close links with practice to increase the relevance of their research (Benbasat and Zmud 1999; Dybå and Dingsøy 2008; Rosemann and Vessey 2008). These suggestions must be seen in the context of the traditional rigour versus relevance debate in academia (Lyytinen 1999).

Proponents of closer links to practice see access to professional reality as a key prerequisite for relevant research, and in this respect practitioner researchers have the obvious advantage of natural access to professional practice. However, with regard to papers published by practitioners, their privileged access to reality does not necessarily lead to relevance for practice.

One obstacle to relevance is that employers or clients may restrict publication of critical information (Heiskanen and Newman 1997). Another obstacle is mentioned by Gummesson (2000): Research critically depends on the publication of research methods and procedures. Unfortunately, practitioners tend to neglect this central requirement, which may cast doubt on the credibility and generalisability of their findings (Baldrige et al. 2004).

Studies show that the relevant knowledge of a competent practitioner is an integration of two complementary forms of knowledge: scientific and practical. The practical knowledge of professionals tends to be subjective, based on individual experience, opinion, a trial-and-error approach, and dialogue among practitioners. The utility of this knowledge is justified based on pragmatic validity rather than scientific validity (Kvale 1995; Van de Ven and Johnson 2006). As Kvale (1995) puts it: 'A pragmatic approach implies that truth is whatever assists us to take actions that produce the desired results' (p. 35).

Researchers are not neutral, instead their personal preferences, values, biases and assumptions influence their perceptions and interpretations (Babbie 2001; Bryman and Bell 2007). These effects are particularly problematic in practitioner research, where the dual roles of researcher and practitioner frequently create conflicts (Fraser 1997; Heiskanen and Newman 1997). Practitioner researchers typically co-create the researched environment, and their research is an inseparable, influential part of the social world that it investigates. Therefore, it is particularly important for them to practice reflexivity to critically acknowledge the effect that their research has on the researched environment (Bryman and Bell 2007; Fox et al. 2007).

2.4 Collaborative Research

Collaborative research of academics with practitioners is frequently recommended in the literature to address the double hurdles of rigour and relevance in research. The underlying assumption is that the complex problems found in practice are multidimensional and require a process of arbitrage in which academics and practitioners together achieve synergies (Van de Ven and Johnson 2006). Other benefits that can arise from collaborative research are opportunities for academics in industry consulting and positions for practitioners as adjunct faculty in academic institutions (Kohli 2001).

While there are many benefits of collaborative research, it is also clear that the motivations, views, attitudes and practices of academics and practitioners regarding collaborative research are likely to differ considerably. This creates potential for conflicts about the research goals and practices, for example, because academic researchers may be more concerned about rigour while practitioners may be more concerned about applicability (Adler and Norrgren 2004; Starkey and Madan 2001; Van de Ven and Johnson 2006).

In a recent study (Oh et al. 2005) knowledge exchange both within and across IS reference discipline boundaries was analysed using co-authored journal articles as indicator. Interestingly, the study shows that co-authorship relations rarely cross boundaries of reference disciplines, indicating that external knowledge exchange through collaboration is limited. The authors explain their findings with a general attraction of human beings to similar others. Their results are interesting in the context of collaborative research of practitioners with academics too. First, they agree with the claim that the substantial differences between academics and practitioners makes

their collaboration challenging. Second, they suggests that collaboration is more likely to develop if the academics and practitioners have similar backgrounds, e.g., if the academics have consulting experience or the practitioners have experience in academic environments.

3.0 Research Design and Method

The phenomenon of publishing practitioners in ISD has not been investigated in depth yet. The literature is diverse and covers a number of relevant issues, but no comprehensive research framework has been suggested. At the same time the research questions stated in the introduction are rather broad. For these reasons, the research reported in this article has an exploratory character, and that suggests a qualitative research strategy to identify key themes, concepts and relationships that help to make sense of the motivations and activities of practitioners who engage in ISD research and publish their findings. A single case study is often useful at the outset of theory generation to explore a situation or phenomenon in depth (Benbasat et al. 1987; Creswell 2007).

A single case study design was adopted to generate understanding of the research subject's motivations, actions and experiences. This intention suggests a constructivist ontological position, which assumes that reality is constructed through interaction with others. This position is appropriate here, because the practitioner researcher is deeply engaged with academic and professional communities, often in the complex role of a boundary spanner. For example, questions about a practitioner's motivation to publish are intrinsically shaped by interaction with others.

The consultant C was purposefully chosen for the case study for three reasons: First, he is a very clear example of an ISD practitioner, because he has worked in a number of different positions in industry for about 30 years. His only academic job was a 4 year contract with a university, where he lectured 2 days per year on average. Second, C is a clear example of a publishing practitioner, because he has published more than ten textbooks and has constantly published refereed research papers at conferences and in journals throughout his professional career. Third, C has extensive experience of collaborative research with academics, because he was instrumental in the development and marketing of a complex ISD approach which resulted in co-authored publications with academic researchers.

Two data collection methods were used in the research. First, a semi-structured, in-depth interview was conducted with C. The interview consisted of 14 general questions that ensured that typical research activities were covered (e.g., question 6: 'On what types of observations are your papers based?'). The interview questions are deliberately general in nature to give C room to express his personal view of his research. An interview guide was used to ensure that some critical aspects were covered, which followed largely the recommendations given in Myers and Newman (2006). The interview took about 2 hours, and it was recorded, transcribed and coded for analysis following the procedures described in Miles and Huberman (1994). Second, C was asked to identify a sample of refereed publications that give a good overview of the breadth and depth of his research. In answer to this request he suggested a list of 12 publications, published in a period of 20 years, which were summarised and coded too.

In both cases the codes were initially based on key subjects and concepts from the literature review, but during the analysis most of the codes were refined, in particular renamed, to reflect emerging understandings. However, at any time the coding schemes reflected the basic set of themes and concepts presented in the literature review. In that process the coding schemes evolved, but the selection of themes proved to be a sufficiently comprehensive and stable theoretical lens to guide analysis and interpretation of the empirical data.

In line with the constructivist ontology employed in the study the analysis and interpretation of the empirical data followed an interpretivist epistemological position. This means that the interpretations focus on potential subjective meanings attributed by C to situations and actions in order to explore his point of view (Bryman and Bell 2007).

An interpretive epistemological position does not mean the uncritical acceptance of statements by the researcher (Klein and Myers 1999). For this reason the data from the interview is frequently checked against the data from the consultant's refereed papers. These two different perspectives on the consultant's work help to generate a more comprehensive and credible interpretation of the data, particularly if differences are identified that may indicate insufficient understanding of the researcher. However, differences or contradictions can also mean that the consultant's espoused theory and theory in use conflict. In both cases differences were used as opportunity to question and improve understanding (Poole and Van de Ven 1989).

4.0 Main Themes and Findings

In the following we present the empirical data according to the four main themes identified in the literature review.

4.1 Motivation to Publish

Much of the literature suggests that publications, particularly books, can help to market professional services. This view is to a degree shared by C who notes, 'If you have written a book, it's easier to get work. Papers have no effect whatsoever, ...'. This suggests that C's motivation to publish papers is not primarily motivated by the expectation of extrinsic rewards.

Intrinsic rewards play a more important role, and three themes emerged in the interview. First, he experiences pride when one of his papers is accepted by a reputable journal or conference. Second, he enjoys the challenge to write papers that successfully compete with the papers of full-time academics: '... I get a certain satisfaction when I can do that [writing research papers] as well.' Third, he enjoys to reflect on a complicated, theoretical problem for his own benefit, as he states in the interview: '[Writing papers] gives you a chance to think through a difficult theoretical problem. ... [When you write] you have to clarify. In order to explain something to someone else, any teacher will tell you this, you have to understand it'.

The interview also suggests that C is motivated by the experience of social rewards at conferences to a degree. Signing his own books at conferences is an obvious example that he mentions. Publications also bring him in contact with other researchers and practitioners, for example at conferences. He describes the feedback on these occasions as a major motivation: 'No, I love it [feedback]. That's one of the reasons for doing it [publishing].' C likes to give presentations and enjoys his expert status which allows him to express his sometimes controversial opinions from a privileged position of expertise and authority. For example, competition with the audience appears to be something C enjoys: '... I try to challenge the audience. ...'

4.2 Writing Papers

When asked for whom he writes his papers C answers, "I don't had always a clear idea who the audience is. ... the stock answer is, 'People in the computer business. ...' But

the really honest truth is that I write it for myself." Indeed, this statement is in agreement with the 12 papers in the sample, because in them he does not explicitly define the target audience.

Regarding the genre of his papers C gives some indications in the interview which can be subsumed under three aspects. First, the purpose of his writings is to challenge and educate the reader and to provide new ideas. Second, regarding the contents he claims that all his ideas come from his consulting work and that he consciously tries to be multidisciplinary. Third, he emphasises that he sees himself as a generalist who in his publications tries to integrate materials from different areas and disciplines.

Interestingly, he does not claim to provide any case studies of his practical work. Indeed, this observation is confirmed by a look at the 12 papers in the sample: None of these papers comes even close to an empirical case study. Instead, these papers are surveys, conceptual papers, opinion papers or how-to papers. In some of these papers anecdotal evidence is provided that clearly relates to C's consulting work, but none of these papers is based on systematically collected primary data.

An important basic quality attribute of papers is the credibility of conclusions. In the interview C shows that he is aware of confounding influences on research outcomes and refers to the Hawthorne effect and the placebo effect as examples. He is also aware of the necessity to discuss alternative explanations, for example, whether a method on its own is successful or whether other factors play a role too.

Regarding the credibility of conclusions C makes the point, 'I rely on the consultancy for credibility as a writer' and contrasts this with the credibility of academic writers: "So the reader is expected to believe what I say more, not completely, obviously, but believe it more, because I say I'm a practitioner, not an academic." This belief in expert opinion of practitioners as justification for conclusions in general is evident throughout the interview, and this appreciation also shows in the fact mentioned above that some of C's papers belong to the genre opinion paper.

Dissemination effectiveness seems to be no major concern to him. When asked how he promotes his work he answers: 'Badly. Speaking at conferences, really.' Only when prompted he adds: 'Yeah, books, papers.' But the clear impression in the interview was that the subject does not interest him much. This impression is in line with the analysis of the 12 papers in the sample: Only one of these was published in a first-tier magazine (IEEE Software), and the others were published in less reputable journals and at mid-range conferences.

4.3 Research and Practice

A number of passages in the interview deal with relevance of research, and it is clear that C values theory that is derived from concrete, practical experience: '[Can textbook knowledge be relevant to practice?] You have got to do this praxis thing. You've got to take concrete experiences from life, pass them through a theoretical mill, and come out with lessons.'

Theory generation based on practice is a concern expressed throughout the interview. This is shown by statements like, 'Because you take knowledge from experience. Then you have to turn it into a theory' and "But the idea is that all good theory is based in practice, but practice cannot proceed without theory. ... There is a kind of dialectical relationship between theory and practice. They tend to penetrate each other. That's my view."

While C is an outspoken advocate of the integration of theory and practice in research, and sees that as a major goal of his research, he is also aware of limitations in his own work as practitioner where his options to try out new ideas are limited: "But, of course, you can't do this [trials] at random, because it's your living, you know. Nobody would employ you if you got it wrong."

C sees value in collaborative research, as the following statement shows: 'If you take a practical point of view and an academic point of view and put them together, it's worth more than the sum. Two plus two is more than four. Synergy!' This statement suggests a rather complementary relationship between academic knowledge and practical knowledge. Interestingly, this is not reflected in the two papers in the sample that C co-authored with a university professor. Both these papers are conceptual papers, and in them there is no explicit discussion of 'a practical point of view' versus 'an academic point of view' and there is no conscious attempt to relate them in a synergistic way.

In the interview C refers to concepts that are indicative of reflexivity, for example the possibility of bias, role conflicts, etc. However, when directly asked whether he ever had problems with role conflicts in his research he answers: 'I have never found any contradiction.' In the interview C does not mention concrete applications of reflexivity in his work. Typically, in research papers a section or paragraph that discusses limitations of the research is an indicator of reflexivity. Interestingly, in the sample of 12 papers almost no such text passage is found.

4.4 Collaborative Research

C has extensive experience of collaboration with full-time academics, which resulted in co-authored books and papers. Often these collaborations were the result of circumstances rather than planning, for example, he notes that he gets in contact with academics '... in a lot of strange ways, though. I mentioned ..., who basically wrote a review on one of my books. And then I met him at a conference, and we did some joint work.' It becomes clear in the interview that mutual sympathy plays an important role for the development of these discretionary collaborations too.

C did much collaborative work with a professor on an ISD method, which provides an interesting case that illustrates potential conflicts. As noted before, this method lost out to a competing approach and became insignificant. In that context C recalls: '[The professor] is kind of helpful, but he gets carried away. He is a bit obsessive. ... [He] is a career academic, you know, from wall to wall. And he can be a bit obsessive about [the method]. He sort of believed in it, when no one else believed in it [any more].'

At some point C lost interest: "... and I thought this is going nowhere, I don't want to go that way. 'Cause it was becoming purely academic stuff, whereas I'm more interested in practical exercise."

5.0 Interpretation and Discussion

The following discussion focuses on the interrelationships of themes and addresses the four research questions presented in the introduction.

5.1 Marketing and Achievement

C's assessment that books make it easier to market professional services while papers have little effect in that respect is based on considerable experience as he is author of a number of books as well as papers. His assessment is in line with the focus on books rather than papers in much of the literature (e.g., Johnson 2008; Jones 2003; Patrick 2006; Satterfield 2004; Weiss 2002).

This result may indicate that marketing considerations were not a key reason for C's decision to spend considerable resources on writing papers. The factors that motivate professionals can of course change during their career. Hall et al. (2008) point to the importance of variables like 'career stage' in their analysis of factors that motivate

software developers. These authors argue that a developer who feels economically secure may be less motivated by extrinsic rewards than one who feels less secure. This assumption is a key hypothesis of content theories of motivation, most famously Maslow's hierarchy of needs (Rollinson 2005). Therefore, C's motivation may have been more marketing-driven in the earlier stages of his career, when he may have believed that papers were effective marketing tools, but that he later changed his opinion to the position expressed in the interview.

Content theories would further suggest that a professional who feels secure will then look for immaterial, intrinsic rewards. Indeed, the interview shows that C is motivated significantly by pride, a feeling of intellectual achievement, and the feeling that he can compete with academics. Writing papers gives C the opportunity to experience these feelings of achievement, and this is in agreement with a widely held view that humans have a natural need for achievement and growth (Latham and Pindler 2005).

With regard to the first research question, this leads to the conclusion that at present C's publications are mainly motivated by a feeling of achievement rather than marketing considerations. This may have been different in the past or change in the future, however, because motivation is a dynamic state that depends on personal and contextual factors, e.g., career stage.

5.2 Nature of Practitioner Papers

One assumption implicitly made in parts of the literature (e.g., Erdogmus 2007; Fox et al. 2007; McConnell 2002) is that the author of a research paper mainly writes for an audience and that in order to write a good paper the author should have a clear idea who the audience is. While this view sounds plausible, C expresses the different position that he writes to a large degree for himself and his own benefit. This is likely a factor why he does not explicitly define the target audience for his papers.

Practitioner researchers enjoy the advantage of natural access to professional practice, that outside researchers will find hard to achieve in many cases. This may raise an expectation that practitioner papers are likely to expose this reality, for example as empirical case studies. C's publications rather defy this expectation. Using the comprehensive genre taxonomy suggested in Montesi and Lago (2008) it is clear that none of his papers in the sample qualifies as empirical research paper, and none of them reports systematic, comprehensive data collection in practice settings. While some of the papers contain anecdotal observations from practice, which agrees with

C's claim that his ideas come from consulting work, the amount of these observations is rather low.

One reason for this are certainly legal limitations, e.g., non-disclosure agreements that professionals have to sign. Another reason became clear in the interview with C: He writes his papers largely for himself, to reflect on his own work. In his papers he writes what suits him rather than potential readers. For example, in none of the 12 papers in the sample he takes an academic theory from the literature, tries to put it into practice, and reports the results. This is interesting, because a look at the call for papers for the 'Software Engineering in Practice' track at ICSE 2009 reveals that it encourages exactly that kind of submission from practitioners (ICSE 2009).

One reason for this focus could be the belief that experience papers best serve the needs of an academic audience. Another reason may be the assumption stated in Rosemann and Vessey (2008:11) that 'practitioners are most often unfamiliar with academic research'. If this is assumed it is straightforward to limit contributions from practitioners to experience reports.

From the perspective of academics the limitation of practitioner research to experience papers may look like a reasonable division of labour between academics and practitioners. The view that practitioner research will normally stay close to professional practice is also voiced by other authors, e.g., Fox et al. (2007) and Jarvis (1999) depict practitioner research as a kind of action research. C is an example of a practitioner researcher who does not meet this expectation and he takes pride in his ability to write theoretical research papers that successfully compete with those of full-time academics.

In conclusion, the second research question can be answered as follows: There is agreement in the literature that there is no need for a genre 'practitioner paper'. Instead, good practitioner research papers should follow the same established standards of writing as academic papers where applicable. In the academic community some value is seen in practitioner papers that report experiences made in professional practice. However, C is an example of an author who shows little interest in this kind of experience paper and prefers to write theoretical papers for reflection in which he sees more value for himself.

5.3 Relevance and Reflexivity

In the interview C repeatedly stresses that he regards a theory as 'good' if it is derived from observations in practice and tested in practice. He sees his natural access to professional practice as an advantage of his research: "So the reader is expected to believe what I say more, ..., because I say I'm a practitioner, not an academic".

This relates to the traditional rigour versus relevance debate in academia which highlights a desire for both rigour and relevance in research which in practice necessitates some kind of trade-off (Benbasat and Zmud 1999; Dybå and Dingsøy 2008; Lyytinen 1999; Rosemann and Vessey 2008).

The rigour versus relevance debate draws attention to the natural, privileged access of practitioner researchers to professional practice and how that can have a positive effect on the relevance of their research, but it also reminds of potential negative effects on the credibility of practitioner research. Negative effects can, for example, be caused by role conflicts between the professional role and the role as researcher. C points to such a conflict when he admits that his freedom to try out ideas in his professional practice is limited because 'nobody would employ you, if you got it wrong.'

As practitioner researchers frequently co-create the researched environment they are likely to experience role conflicts and other problems that may impact on the credibility of their research (Fraser 1997; Heiskanen and Newman 1997). For this reason reflexivity is particularly important in practitioner research (Fox et al. 2007). The section about limitations of the research present in most academic papers documents reflexivity. C practices reflection and reflexivity in private, e.g., during the writing process and knows the some underlying concepts well, e.g. the Hawthorne effect and the placebo effect, but he barely documents reflexivity in his papers.

A reason for this lack of explicit reflexivity becomes apparent in the interview when he says: 'Out of a hundred projects [that used my method], say, about 80 worked, then you can conclude that it is likely to be successful as a method.' As success is imperative in the consulting market it can be assumed that C will not be keen to discuss a 20% failure rate of his method in publications, even if it was excellent by industry standards.

This allows to answer the third research question: In C's view theory and practice are closely related and require each other. In particular he believes that good theories are based on practice and tested in real settings. While he sees value in his privileged access to professional reality he is also aware of possible threats to the credibility of

research. He knows that problems can arise from his dual role as researcher and professional, but although he practices some degree of reflexivity for himself, his publications do barely report it.

5.4 Collaboration and Goals

Some authors point out that collaborative research between academics and practitioners should be based on clear goals and realistic expectations. The ISD method that C developed as member of a consortium is a good example to illustrate this issue.

In the late 1990s C and the other members of the consortium had the clear goal to promote their approach to make it the leading industry standard in its field. During that time C co-authored a number of publications related to the approach with a well-known professor.

In this case the two authors, one practitioner one academic, could both lend different kinds of credibility to their method. One could make the claim that it worked in practice, the other could claim that it was theoretically sound. In that way the different backgrounds of the two authors produced important synergy in terms of credibility that was potentially useful to encourage adoption. The common goal promised significant rewards for both parties, financial and non-financial, and as a result the different backgrounds created no problems, instead the synergies were more visible.

However, when it became clear that the ISD method was losing the fight with its main competitor, C lost interest and no more co-authored papers were published. The professor continued to publish proof-of-concept papers on the approach. This reflects different goals: C mainly measured success of the approach in terms of adoption in practice, while the professor was probably more interested in publications and citation counts.

With regard to the fourth research question this suggests that C's experience with collaborative research is generally positive. As long as strong, common goals dominated the collaboration, the different perspectives of practitioner and academic were experienced as positive and synergistic. Only later, when the common goal became unattainable, conflicts appeared and the collaboration ended.

6.0 Conclusions and Implications

In this paper we have investigated the phenomenon of publishing practitioner researchers in ISD in light of four research questions. Adopting a qualitative research strategy an exploratory case study of a practitioner researcher was carried out. This resulted in empirical data from two sources: an in-depth interview and a sample of publications. Based on an interpretive analysis of this data the research questions were answered and provide some interesting insights.

C writes papers largely for himself as a process of reflection on his work. His main interest is theorising, and therefore he does not write experience papers. One reason for this preference may be that he sees theorising as the more rewarding challenge compared to mere reporting of experience. His preference conflicts with the demands of a part of the academic community which is particularly interested in experience papers from practitioners, but as C is not dependent on the publication of his papers there is no need for him to meet these expectations.

C strongly believes that good theory is based on practice and claims that his privileged access to professional practice gives him an advantage over academic research. This view contrasts with the lack of attention to research methodology in his research, e.g., in relation to systematic data collection, and the reliance on limited anecdotal evidence and personal opinion. Such methodological issues may neutralise the advantage practitioner researchers have in terms of access to practice and reduce the relevance of the research to other practitioners as well as academics.

C is aware of threats to the validity of research in general and practitioner research in particular but reflexivity is no major concern in his papers. A reason may be that he largely writes them for himself and may be reluctant to question his own beliefs. Reflexivity appears to be an area where C's evident awareness of potential problems with his research is not documented in his publications, and it is unclear to what extent this is a deliberate choice.

C has extensive experience with collaborative research with academics. There is no indication of a division of labour where academics provide theory and he mainly adds a practice perspective. This reflects C's ambition to do the same work as academic researchers, which makes it appear unlikely that he would agree with such a division of labour if it was suggested.

Two practical implications result from this study:

First, C is an example of a practitioner who is interested in research beyond experience papers. This suggests that the role of practitioners in collaborative research is not and should not be limited to the contribution of a practice perspective.

Second, the study provides evidence that typical weaknesses of practitioner papers exist, e.g., regarding research design, data collection and reflexivity. Academic research focuses on these areas and that supports the idea that collaborative research can result in significant synergies and benefits for both sides if the strengths and weaknesses of academic and practitioner research are balanced carefully.

One major limitation of this research is the use of a single-case study which does not allow for generalisation of results. However, generalisation is not a major goal of this study, instead its purpose is to identify some key aspects of the research subject and provide initial understanding.

Another limitation is that the practitioner himself selected the sample of publications used in this study. This was regarded as desirable, given the interpretive position adopted here, but it may have biased the results.

A third limitation of this research relates to instrumentation and data analysis in qualitative research. The interview questions and coding schemes developed and used in this research reflect the exploratory nature of the research. In the opinion of the author useful solutions were developed in the course of the research, but these are not compelling. The research process, in particular the development of the coding schemes, was iterative and incremental rather than deterministic and linear. Other researchers may arrive at different, equally justifiable coding schemes.

Again it is argued that this degree of ambiguity is acceptable given the exploratory aims of the study. At this stage of the research no claim is intended that the results obtained in this study are 'the truth' or fully replicable. However, the answers to the research questions are plausible and certainly valuable in the design of future research efforts.

A fourth limitation is the background of the researcher who prior to this study presented about 20 practitioner papers at academic and professional conferences. These experiences have motivated the study and are an undeniable source of bias. Klein and Myers' (1999) principles for interpretative studies were applied throughout this research to mitigate the effects of the researcher's background.

Two suggestions for future research can be made: First, a multi-case study would be useful for replication and to enable generalisation. Second, demographic factors, e.g.,

career stage, may be moderating variables which should be investigated in future studies.

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