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RESEARCH-BASED COMMUNITIES OF PRACTICE (CoP) IN UK HIGHER EDUCATION: THE VALUE TO INDIVIDUALS

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Research-Based Communities of Practice (CoP) in UK Higher Education: The Value to Individuals

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DECLARATION

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work.

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ABSTRACT

Higher Education Institutions (HEIs) are knowledge-intensive organisations competing in the context of knowledge and research activities, as well as programmes and services offered. Research is integral to institutional competition to determine their status and standing and it underpins academics' responsibilities in developing intellectual skills and capacity of learners. Whilst universities adopt formalised approaches to developing research activities, there is a growing trend towards informal groupings or communities of practice (CoPs) where like-minded individuals seek to share common interests in particular research areas. These CoPs offer an alternative approach to developing research within HEIs, especially where efforts to improve faculty research have met with mixed success as there are no clear guidelines and relatively little is known about the mechanisms that facilitate research amongst academics. While there have been past research in various sectors on how CoPs benefit organisations, little has been focussed in the HE sector, in particular how it benefits individuals in terms of doing research and this forms the distinctiveness of this research.

The aim is to illuminate, explore and gain insights of individuals' perceptions of the value and impact of CoP membership within research communities in HE and the potential impact on subsequent research. The CoP concept and the benefits identified in past research in general sectors serve as the focal framework of this research and other theories i.e. value, perception and HE, are included to support and ground further analysis in the overall study. This research takes the social constructionist standpoint, trying to understand individuals' experience of participating in these research communities, through the interpretive lens. It adopts the qualitative approach using observation and interviews (supplemented by storytelling and critical incident technique) to gather data which are then analysed using the narrative analysis approach paying attention to individuals' experience expressed through their stories and incidents.

An analysis of data revealed that individuals found these research communities' membership valuable as it has helped and supported them in terms of doing research and have impacted them personally, professionally, intellectually and socially. Twenty perceived values have been discovered; twelve of which are supported by past organisational research, but mirrored also in HE i.e. autonomy and freedom to think beyond; sources to ideas; sounding board; intellectual discussion; like-mindedness; alternative perspective and cross pollination of ideas; informal ground for learning and training; networking, information sharing and updates; support and guidance; sense of belonging; identity; and intrinsic fulfilment. Although, there are some similarities in these twelve perceived values, they have benefited and impacted on individuals in their own way. The other eight perceived values i.e. overcoming intellectual isolation; move towards collaborative research; response to research pressure; synergy and leverage; time and energy saving; foster tangible returns; drive research; and opportunity to meet, have emerged from doing research in the HE sector and provide new insights not previously discussed. Thus, the contributions of this research are it has drawn on a wide range of literature put together in a unique way; it has extended the CoP concept by applying it to HE for the purpose of doing research; and further understanding on how individuals benefit from their membership, which was never conducted in such a way in past research. Above all, it has offered new insights and raised awareness of the values of research-based CoPs' membership to individuals and this adds to the research literature in CoP as well as the HE context.

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CHAPTER 1

INTRODUCTION

1.1   INTRODUCTION

The opening chapter provides an overview of this thesis, beginning by introducing the subject of this inquiry and the background to this research, thereby explaining the motivation and the importance of the topic.   This covers a brief review of the research on knowledge management and communities of practice to highlight the apparent gaps in the previous research.   It then sets the scene and the context in which this study is taken, namely the higher education context, detailing the scope of this study.   This then leads to the research aim where the key question to this study is clearly laid out followed by a brief description of the theoretical framework upon which this study is based and the methodology adopted to answer the research question.   Also, the expected contributions of this research are presented and the chapter will conclude by explaining the logical structure and layout used to move the reader from the data and findings towards the conclusions of this study.

1.2   BACKGROUND OF RESEARCH

"Why study this topic?"   When the researcher began to design her research proposal, she has revisited the literature on Learning Organisations (LO), the topic she pursued in her Masters study.   Then, LO was relatively new and had not been much researched.   At that time, businesses had to raise their standards to gain competitive advantage due to the changes in trends such as globalisation, deregulation, privatisation and increased customer sophistication (Quinn, 1992).   These

interrelated trends called for significant changes in organisational theories and practical guidelines or strategies. Researchers have responded by making enquiries on organisational learning, focussed on descriptions of learning organisations (Pedlar, Burgoyne and Boydell, 1991), their ability to continually transform themselves through modifying their behaviour and transferring of knowledge (Garvin, 1993; Pedlar *et al.*, 1991; Senge, 1990), their learning activities and the organisation conditions that support them (Argyris, 1964; Argyris and Schon, 1978; Huber, 1990; Senge, 1990; Ulrich, Von Glinow and Jick, 1993).

Moving into the same strand, further review of literature had revealed that learning is at the heart of organisations where knowledge of their employees is seen as their most valuable asset (Darroch, 2005; Davenport, 1998; Ergazakis, Metaxiotis and Psarras, 2006; Stonehouse and Pemberton, 1999) which is a unique path dependent, causally ambiguous, and hard to imitate or substitute (Cabrera and Cabrera, 2002). These characteristics make knowledge an important source of competitive advantage and consequently, the logical target of managerial attention (Bou-Llusar and Segarra-Cipres, 2006; Drucker, 1993; Ergazakis *et al.*, 2006; Hamel and Prahalad, 1994; Leonard-Barton, 1992, 1995; Pemberton and Stonehouse, 2000; Prahalad and Hamel, 1990; Strassman, 1985). This is especially true in today's knowledge economy and most companies work assiduously to capitalise on that fact, contributing to the evolution of knowledge management (KM) – the systematic and explicit management of knowledge related activities (Davenport and Prusak, 2000; Kenney and Gudergan, 2006).

Searches in this area have led the researcher to a range of KM initiatives. Early attempts at KM were based on information systems where companies tried to capture all the knowledge of an organisation into databases that would make it easily accessible to all employees. These attempts to transfer knowledge within and across organisations have met with incomplete success (Szulanski, 1996). One of the reasons is because the information systems were only able to capture the explicit knowledge (knowledge which can be captured and codified into rules, procedures, manuals, etc. and it is easy to disseminate) but not the tacit knowledge (knowledge that cannot be easily articulated and is elusive) (Polanyi, 1966) which underlies the competitive capabilities of organisations (Connell, Klein and Powell, 2003; Leonard and Sensiper, 1998; Styhre, 2003; Tell, 2004). Later, there were expositions on the futility of such KM endeavours and organisations found that knowledge is not something that can be managed like other assets as it is always tied to people and is therefore not reproducible in information systems (Probst, Raub and Romhardt, 2000). This is especially true in terms of tacit knowledge since it has a personal quality and resides in the mind of an individual. It is often the tacit nature that makes it difficult to be shared and communicated as it is deeply rooted in action, commitment and involvement in a specific context (Polanyi, 1966; Styhre, 2003).

This has revealed that there are no clear guidelines as to how to develop an effective knowledge strategy and that an overarching theory of KM has yet to emerge since the practices associated with managing knowledge were too complex to be dealt with simplistically (Hall, 2006; Snowden and Merali, 2000) and they have their roots in a variety of disciplines and domains. Even, some have perceived managing knowledge as an unmanageable kind of problem – an implicitly human, individual activity

(Barclay and Murray, 1997), especially when dealing with tacit knowledge. However, recent research in the KM field suggests that it is the interaction between individuals that typically plays a critical role in developing and expanding these ideas (Styhre, 2003). A definite shift in focus appeared to have emerged in KM literature towards the social nature of knowledge exchange, focusing specifically upon knowledge existing within communities and knowledge as a socially constructed phenomenon (Snowden and Merali, 2000). Nonaka, among others, states that tacit knowledge is experience-based and can be revealed through the sharing of experience or by joint participation in evaluative activity – socialisation processes involving observation, imitation and practice (Baumard, 1999; Nonaka, 1991; Sadler 1987; Styhre, 2003). This proposes that communities of practice (CoPs) are becoming a KM's mechanism of choice as KM focuses on improving the means by which individuals' knowledge, as well as collectively held knowledge, is produced and integrated in organisations (Brown & Duguid, 1991, 2001a; Davenport & Prusak, 2000; Lesser & Storck, 2001; Scarbrough, 2003).

So, what are CoPs? The term "communities of practice" was coined by Lave & Wenger to describe an activity system that includes individuals who are united in action and in the meaning that action has for them and for the larger collective (Ardichvili, Page and Wentling, 2003). In brief, they are naturally occurring communities (Stamps, 2001) and are groups of people informally bound together by shared expertise and passion for a joint enterprise (Wenger and Snyder, 2000). They may exist within departments but they are just as likely to cross departmental or institutional boundaries. Although, CoPs exist in a variety of forms, they share a basic structure. A CoP is a unique combination of three fundamental elements: a

domain of knowledge, which defines a set of issues; a community of people who care about this domain; and the shared practice that they are developing to be effective in their domain (Wenger, McDermott and Snyder, 2002a).

Knowledge is the coin of the realm within a CoP because people in CoPs share their experiences and knowledge in free-flowing, creative ways that foster new approaches to problems. Moreover, knowledge that gets passed around in these communities is not limited to the explicit information but quite often it takes the form of implicit or tacit knowledge (Stamps, 2001; Wenger and Snyder 2000). In a CoP, learning is social and happens in practice (Stamps, 2001) where learners enter a community at the periphery and over time move closer to full, legitimate participation as they gain knowledge and learn the community's customs and rituals and adopt a view of themselves as members of the community (Buysse, Sparkman and Wesley, 2003; Lave and Wenger, 1991). Therefore, a CoP is an effective mechanism for nurturing a collaborative culture and increasing the velocity and richness of knowledge diffusion. Additionally, since utilising tacit knowledge is the real gold in KM, a CoP can be the key to unlocking this hidden treasure (McDermott, 2000a) because tacit knowledge resides in relationships and such relationships will help shape not only what individuals do, but also who they are and how they interpret what they do.

Due to these capabilities, CoPs are vehicles for managing knowledge and they are seen as living repositories of knowledge (Wenger 2000b), the critical building block of a knowledge-based company (Brown and Gray 1995) and the Holy Grail to KM (Wenger, 2000a). Some research has been conducted on CoPs as KM vehicles at companies as diverse as an international bank, a major car manufacturer, a U.S

government agency and they have been proven to be useful (Ardichvili *et al.,* 2003; Edmundson, 2001; Fontaine and Millen, 2002; Gongla and Rizutto, 2001; Langford, 2001; Plaskoff, 2003; Spencer, Rushton, Rumizen and McDermott, 2003; vanWinkelen, 2003; Wenger *et al.,* 2002a). This shows that CoPs can help integrate individuals into an organisation (Chao, 2001; Gregory 1993), promote the sharing of best practices, drive organisation strategy (Wenger and Snyder, 2000), improve an organisation's overall performance (Brown and Gray 1995; Sharp 1997; Wenger and Snyder 2000), motivate individuals in the organisation (Barab and Duffy, 2000; Bradsher and Hagan 1995) and develop and retained professional skills (Wenger and Snyder, 2000). Additionally, the researcher noticed that while some research has been conducted in the higher education (HE) sector, the industry the researcher is in, most were around teaching and learning, and limited attention has been paid to research and CoPs. Moreover, most of the previous research has been geared towards how CoPs are of value to organisations, rather than on the way CoPs benefit and impact on individuals i.e. their members. Therefore, this has stimulated the interest of the researcher to study the effects of CoPs within the HE sector and to go beyond the organisation to look into the individual's perspective of the value they attribute to their respective CoPs.

1.3   THE CONTEXT OF HIGHER EDUCATION (HE)

HE is in the knowledge business (Rowley, 2000) and it competes in the context of knowledge and research activities, as well as programmes and services offered. While teaching is an important ingredient to keep universities going in its most fundamental function, faculty research is in the centre of institutional competition between universities where faculty's research productivity in terms of quality and

quantity is an important component in determining the status and quality of universities. In fact, the prestige of individual faculty members and the reputations of institutions, whether on the departmental or university level, rest more strongly on this criterion than on teaching and/or accomplishments of graduates. This is not to suggest that other professional activities of faculty – teaching or service – are unimportant or of lesser concern. It is just that research is a distinctive feature of HE and is a major factor in institutional differentiation (Boaden and Cilliers, 2001; Curran, 2001; Gellert, 1992; Sharp and Coleman, 2005).

Additionally, with the introduction of the Research Assessment Exercise (RAE) in the 1980s that is designed to assess the quality of research performed in the HE sector, universities compete for a higher rating as research funding is allocated as a result of the competitive assessment (Kirkland, Bjarnason, Stackhouse, and Day, 2006). This is because while the results published provide public information and an overview of research quality in the UK, they are also used to determine the allocation of research funds from Government coffers to individual institutions based on the highest RAE ratings (Boaden and Cilliers, 2001; Tapper and Salter, 2003).

Apart from competition, research is a valued activity because research capacities of universities affect the development of the social and economic environment (Boaden and Cilliers, 2001; Mattheou and Saiti, 2005). Although HE is not the only influence on knowledge flow and capacity development, universities are uniquely placed and almost universally expected to take on such responsibility – and are reliant on their faculty to make this happen (Meyer and Evans, 2005). Past studies have indicated that universities are organisational settings in which educational research is regularly

conducted and most of all discoveries have originated in institutions of HE (Atkinson, 1992; Dill, 1986; Kolstoe, 1975; Tapper and Salter, 2003). Research is therefore a critical component of academic management and academic development of universities as well as their mission and purpose (Grant and Edgar, 2003). From the universities' perspective, research is one of the key vehicles to support their survival within the emerging knowledge economy (Brew, 2001; Scott, 1990) and from the society's standpoint, research is central to HE and it is valued by society because it is seen as a means of improving practice by the effective and efficient transfer of knowledge of the academy to business and commerce (Grant and Edgar, 2003) which is ultimately tied up with a country's prestige, its wealth, its history and its destiny (Brew, 2001; Scott, 1990).

Hence, universities are often characterised as knowledge organisations (Goffee and Jones, 1996) as their core activities are associated with knowledge creation and dissemination and learning (Rowley, 2000). The university environment is essentially a collection of individual experts and their contributions to knowledge flow and capacity development depend upon the engagement and productivity of the faculty (Meyer and Evans, 2005). Hence, for a knowledge intensive institution like a university, well qualified employees form the major part of the workforce and most work can be said to be of an intellectual nature (Alvesson, 1999) where academic staff transfer knowledge and develop learners as part of their duties and responsibilities, with research underpinning many of these activities. This is because research may increase faculty knowledge and intellectual vitality (Boaden and Cilliers, 2001; Jencks and Riesman, 1968) and this can lead to continuous development which is considered to be particularly important to academics in order

to stay at the forefront of their professional fields. They must constantly be aware of any developments within their particular disciplines and they need to participate in activities that offer the opportunity to further their own individual development.

Research is therefore seen as one of the fundamental activities that academics engage in for the production of knowledge, for professional development and ensuring current knowledge for teaching purposes (Sargent and Waters, 2004). It offers the opportunity for intellectual stimulation and invigorates higher level learning that enliven staff and enhanced job satisfaction (NCIHE, 1997; Thomas and Harris, 2000). Hence, faculty research is what clearly determines the individual esteem of a faculty member as well as the prestige and quality assessment of a department and even an entire institution of HE. It plays the primary role and it will continue to assume this essential dominance within the academic profession (Gellert, 1992; Tapper and Salter, 2003).

The above description of HE competition, the importance of research and their dependence on the quality of faculty research make it necessary that universities are constantly engaged in improving the conditions for the optimal pursuit of faculty research. However, the institutional support for research is often minimal and it is left to the individual faculty member to look for external funding and organise internal research condition (Gellert, 1992). They are expected to carry out research activities in conjunction with the activities of teaching and service and they also carry out the process of research in a large variety of academic settings (Dill, 1986; Rowley, 1996). However, the RAE has played an increasingly influential role in defining the meaning of research and the role individuals and universities play in

research. One of the effects of this exercise has been a greater focus for research and for stimulating an increase in quantity and quality of publications and this has led to the growth of research management in UK HE (Harley, 2002; Sargent and Waters, 2004). Therefore, research strategies are increasingly being required from departments, schools and faculties to facilitate resource acquisition and management and the cultivation of a research culture (Rowley, 1999). Prior studies have addressed issues of individual characteristics (Creswell, 1985; Finkelstein, 1984; Fox, 1983, 1985); organisational contexts and task structures; the processes and the social factors (Dill 1986; Dundar and Lewis, 1998); and the reward systems given to research performance and activities in professional societies (Dill 1986; Moore, 1992; Creswell, 1986b). However, efforts to improve faculty research have met with mixed success as there is no clear guidelines and very little is known about the mechanisms which facilitate successful research that may increase faculty knowledge and intellectual (Sargent and Waters, 2004). Hence, research is a growing concern of universities and there have been calls for greater attention to research activities and the means of enhancing research is a topic of interest to researchers as well as to their institutions (Dill, 1986; Gellert, 1992).

In view of this need and the nature of HE environment, based on the properties of CoPs mentioned in Section 1.2 above, this research explores the following:

- The concept of CoP has been examined extensively within the business context and has been proven to be invaluable to institutions (Wenger *et al*, 2002a). However, very little is known about how CoPs may benefit educational institution in terms of enhancing research. It is important to understand specifically how CoPs may affect research in universities since universities fulfil

such an important role in the education and development process where research underpins these activities. The same insights gained from studying how CoPs can benefit organisations within a wider variety of enterprises (Wiig, 1999) may also be applicable to the academic context. Thus, this research explores the application of the CoP concept to the research environment in HE. The use of HE as a case study is particularly relevant here since it is the transfer of knowledge and the creation of new knowledge that forms the lifeblood of this sector. As such this thesis extends the existing CoP literature by including educational organisations as potential benefactors of the CoP concept.

- Additionally, past research has typically centred on how CoPs can benefit organisations by integrating knowledge generated from CoPs into organisations (Ardichvili et al., 2003; McDermott, 2000a; Newell, Robertson, Scarbrough and Swan, 2002; Wenger 1999, 2003), but little research has been focussed on the benefits towards individual. According to McDermott (2002), communities typically provide value on three different levels: individual, team/business unit and organisational, but individual community members are the most immediate beneficiaries of communities. Since it is the faculty who must carry out the functions needed for knowledge flow and capacity development to enable universities to perform their unique role in the society (Meyer and Evans, 2005) and it is them who play an important role in the overall institutional processes of competition as well as status and quality orientation (Gellert, 1992), it is therefore worthwhile for this research to gain understanding of how CoP's membership is of value to them.

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Therefore, as suggested by Wenger *et al.* (2002a), the notion of CoPs is an alternative path for sharing knowledge outside institutions' formal hierarchy and this is especially important for large institutions, such as universities, where it may be difficult for employees with similar interests to find each other. Moreover, research is highly dependent on an individual's creativity and intellect and it is done purely out of individual's initiative and motivation. It is not a forced thing and it has to come from inside a person and cannot be established by external factors alone, especially in the case of the exchange of experience – the tacit knowledge (Finke and Will, 2003). Hence, in a knowledge intensive institution like the HE, it is made up most of knowledge workers (the academics) and they are professionals that embrace and enhance a different kind of authority i.e. the authority of knowledge (Wagner and Kellams, 1992). They need the autonomy to take charge and be responsible for their learning. In fact, it is their knowledge (Wenger, 2003, 2004) and it is them who are challenged to meet changing expectations for teaching, research and service (Meyer and Evans, 2005). They are the people who use knowledge in their activities and they are in the best position to manage this knowledge as they know how it affects their ability to do their research and work. However, the knowledge of practitioners is not merely the knowledge of an individual because knowledge of any field is too complex for any individual to cover and it is argued that both individual and collective knowledge figure prominently and the interaction of colleagues is paramount to stimulate research activity. Thus, the notion of CoPs comes to play a critical role in this situation as they are social structures that focus on knowledge and explicitly enable the management of knowledge to be placed in the hands of practitioners (Wenger, 2003, 2004). In this sense, a CoP is an effective mechanism

for nurturing a collaborative culture and increasing participation by individuals, with similar research interests.

Hence, this has stimulated the attention of the researcher to embark on this journey. It is her interest in HE and also CoPs that has inspired her to explore and gain more understanding of the perceived values and impact of CoPs for individuals, specifically for the purpose of doing research bearing in mind its importance in the HE. More specifically, this study focuses on the individual's participation of these research-based CoPs and in what way this membership impacts and creates value in improving their research. Additionally, being an academic herself and now a doctoral researcher, it is of interest to know how CoPs benefit and impact upon individuals in HE in terms of developing research and the way in which researchers learn and improve their research credentials and expertise.

1.4   RESEARCH OBJECTIVE

Therefore, the objective of this research is:

> *To illuminate, explore and gain insights of individuals' perceptions of the value and impact of CoP membership within research communities in higher education and the potential impact on subsequent research.*

The aim is to unravel the complexities of individuals' reflections about their experience as they participated in CoPs. It will help participants to make sense of their experiences as CoPs' members, to identify and develop insights of the values and impacts of their membership towards doing research. More specifically, this research seeks to further understanding of:

- What are individuals' perceptions of the values of being a member of research-based CoPs? What benefits does belonging and participating in the research-based CoPs bestow on a member? This is to help participants recognise and identify the benefits a research-based CoP can offer.

- Why have they perceived these experiences to be valuable and how are they linked to doing research? In other words, how has the membership impacted or improved the quantity and the quality of their research?

- Where / How CoPs can fit into HE and the role they play to enhance and to improve research?

Thus, this research is 'individual-focussed' and studies the participation of members of research-based CoPs to critically examine the potential benefits of CoP membership and where CoPs fit into HE in terms of the role they play in carrying out and developing research.

1.5   THEORETICAL FRAMEWORK

The focal theoretical framework of this research is based on the CoP concept drawing mostly on the work of Lave and Wenger (Lave and Wenger, 1991; Wenger, 1998b) among others, giving the background of CoPs and describing its structure, characteristics, the different types of CoPs and its theoretical foundation i.e. situated learning, reflective practice and legitimate peripheral participation (LPP). Together, the values of CoPs from the outcomes of past research will be explored and because CoPs can exist in a variety of forms and because individuals participate in a variety of CoPs, the forms that their participation takes in various CoPs may be different as different people 'see' things differently and behave in their world not as it really is,

but as they see it (Huczynski and Buchanan, 2001). This means that different people within the same culture have different experiences and create different value because value is a quality of things that is context- and subject-sensitive (Castro, 2003).

Hence, in order to gain a better understanding on perceived values (the outcomes of this research), literatures from other disciplines are reviewed and included in the overall study. It incorporates literature that explains and clarifies what is perception and value in the context of this research as well as how value can be surfaced. In other words, the main theoretical framework of this research is the CoP concept, focussing on its central tenets i.e. situated learning, reflective practice and legitimate peripheral participation (LPP) to understand the properties and characteristics of CoP and how individuals participate in them to create value from its membership. On top of that, to further understanding on how individual's make sense and construct value, this research has borrowed theories from other disciplines i.e. perception and value, to supplement the CoP concept. In essence, these literatures have been put together in a unique way and they are the framework that underlies, shaped and refined the research question as well as the data gathering and analysis process.

1.6   METHODOLOGY OF RESEARCH

The philosophical overview of this research is based on social constructionism, concentrating on the different constructions and meaning individuals place on their experience as they participate in research-based CoPs and why they have different experiences (Easterby-Smith, Thorpe and Lowe, 2002). In other words, it focuses on individual's rendition of the values that are constructed between members through relationships (du Toit, 2003) shaped by the social processes in CoPs (Schwandt,

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1994, 2000). In order to understand this, one must interpret it (Easterby-Smith *et al.*, 2002) and therefore the researcher has seek to interpret the different experience individuals have and how these experiences have created value for them.

Therefore, the methodology that is deemed to be appropriate for this research is of a qualitative nature as the researcher believes that the findings cannot be arrived at by quantitative data analysis but through the interpretation of findings from an individual's perspective. This will help to provide a great deal of descriptive detail when reporting the fruits of this research and to support its aim which is to shed light and to gain further insights on individuals' perceptions. Given the influences of qualitative approaches and the research aim, the methods employed for data collection are observation and interview. Observation is conducted during the CoPs' meetings to gain an understanding of its context and to build up data or questions needed to be followed up during interviews with individual members to obtain more details or description of their experience. Hence, both methods supplement each other and can help participants make sense of their experience which enable the researcher to gain deeper insights into individual's perceived values and impacts of CoPs' membership towards their research.

1.7   SCOPE OF STUDY

This research is based in the HE sector targeting faculty staff in UK universities. The research question was applied in the HE context to five research-based communities comprising of thirty members at seven institutions (4 universities and three other organisations). The researcher selected them because they were accessible to her and they demonstrate the characteristics of CoPs as well as the three

key elements identified in the CoP literature i.e. domain, community and practice and they fulfilled the purpose of this research. Basically, they are research-based communnities existing within the HE environment, made up of individuals who have come together informally for the purpose of doing research.

CoPs exist in a variety of forms i.e. virtual e-based forums or face-to-face but this research is concerned only with physical CoPs, where members interact in person because it is argued that only this will enable individuals to achieve the necessary level of engagement to develop their relationships and learn (Lesser and Storck, 2001; Orlikowski, 2002). It is also argued that face-to-face contact is a condition to get the kind of rapport and to build trust that leads to true collaboration (Stamps, 2001). Additionally, the physical meeting creates chance discussions which lead to new ideas and thoughts through ongoing conversations that are important to stimulate research while it is hard to come by online CoPs as they are brief and intermittent. This is because there are too many nuances associated in a in a face-to-face meeting i.e. gestures, grimaces, look, tones and etc., that will be missing and cannot be replicated online (Cohen and Prusak, 2001). Therefore, the researcher has chosen to concentrate on physical CoPs because by nature they require a highly interactive social process between its members in a co-located, face-to-face environment since the co-location factor was considered critical because much of the tacit knowledge that is shared and exchanged is accomplished through direct first-hand observation, interaction with others, subtle body language and so on (Holtshouse, 1998).

Nevertheless, there is nothing that rules out communication media such as email, discussion groups or chat rooms as support mechanisms for participating in

distributed CoPs (Ardichvili *et al.*, 2003; Hildreth, Kimble and Wright, 2000). In fact, technology has a helpful role to play but it will not be the driver because all the important and valuable information about a process or idea is too complex and too experiential to be captured electronically (O'Dell and Grayson, 1998), thereby only capturing the explicit and not the tacit knowledge which is argued to be the key to the expansion of knowledge (Holtshouse, 1998).

Also this research is focussing on the values or benefits of CoPs' membership and is not looking into the downside of CoPs which is mentioned in some literatures (Pemberton and Stalker, 2006; Reynolds, 2000; Roberts, 2006; Wenger *et al.*, 2002a). CoPs are not good or bad in themselves as they can be a source of problems e.g. exclusion, inbreeding, narrowness and etc., as much as a key to solutions, depending on its activities and context (Wenger 1996). However, the group's processes and its dynamics (e.g. politics, power, role etc.) are also not the focal point of this research. What this research is interested in is member's retrospective evaluation and sense making of their participation, the outcome of the participation – how by joining CoPs have benefited and impacted members in their research. Essentially, the aim is to apply the CoP concept into HE to see how it can benefit its members in terms of doing research.

As for values, it has been studied in many disciplines in different ways. For example, among others, in mathematics and science it indicates an amount or its ranking in a classification system; in economics it is seen as the price of an object or service and is based on market's demand and supply; in marketing, value is the quality of an action or object which makes up consumers' experience relative to how it can satisfy

their needs at that time; and in moral and ethics it refers to the individual or collective principles or standards used to make judgement about what is important or valuable in their lives (McEwan, 2001, Wikipedia, 2005). In this study, the researcher is focussing on value as an end, an outcome and as an object of benefit or satisfaction of a need i.e. the benefit and the usefulness of CoPs in helping individuals improve their research, which is consistent with the value concept in the marketing perspective as it fits in best with the purpose and the philosophy of this research.

1.8 DEFINITION OF TERMS

At the outset of this study, the researcher felt that it was important to develop a definitional framework of the terms that would be employed to foreground in order to avoid any assumptions or ambiguity. Some of the terms below are explained briefly and will be elaborated upon in the following chapters.

Knowledge can be defined as information that is relevant, actionable and linked to meaningful behaviour and is characterised by its tacit elements that are derived from personal experience (Tippins, 2003). It is embedded in the social contexts in which it was created so that it retains its full value and meaning and it can be "managed" within the communities in which the knowledge is housed by members who generate, refine, share, distribute and used the knowledge (Brown and Gray, 1995; Wenger, 2000b).

A research-based CoP or a research group at this point is defined as a collection of individuals who have come together for the purpose of doing research, bound by

informal relationships that share a similar interest and a common context (Snyder 1997). Research, in the context of this study is defined as the scholarship of discovery (Boyer, 1990). It is an inquiry designed to produce or expand original knowledge, including scholarly activity such as generating, testing and validating knowledge (Brew, 2001); investigating and synthesising for the purpose to contribute to the body of knowledge that shapes and guides academic and/or practice disciplines (Powers and Knapp, 1995); and advancing knowledge and understanding (Braxton and Bayer, 1986; Creswell 1986a; Oliver, 1997). Individuals referred to here are members of the research-based CoPs made up of academics or faculty who are known as individuals holding academic rank in universities (Creswell 1986a) and other researchers. At times, these individuals are also identified as novices or experts. Novices are those who have the domain education but little or no research/work experience, whereas experts or sometimes referred to as senior researchers are individuals who have in addition to their domain education a considerable amount of research/work experience (Etelapelto and Collin, 2004).

As for perceived value, at this stage, in this research, it is referred to as the worth, benefit or gain that the respective member perceived that he or she has obtained from participating as a member of the CoP. It is highly personal and it varies widely from one individual to another (Holbrook, 1994; Zeithaml, 1988). In fact, it is relative and it lies in the eye of the beholder (Danner, 1981; Konrath, 2003; Regebro, 2004).

1.9   SIGNIFICANCE OF RESEARCH

The opening statement above allows the researcher to suggest that there is a critical gap in the knowledge base about CoPs in HE and their members. The literature in

this area is scant and that there are many unanswered questions. This is therefore the distinctiveness and the central tenet of this proposed research. It is envisaged that the research described in this thesis will make the following contributions:

- It extends the CoP concept by providing a detailed view of the values and impacts of CoPs' membership. In the past, literature has concentrated on the benefits of CoPs in organisations and there is scant literature on CoP's benefits to its members. Thus, the contribution of this research is exploring CoPs from within these communities to gain more insightful understanding of why individuals participate in such groupings, how the membership impacts them and the values they derived from being a member of these research communities. Only then will the benefits of CoPs be fully understood.

- It further extends the concept of CoP by applying the concept in a HE environment for the purpose of doing research. Past research has been conducted at length within various industries but little has been carried out in the HE sector. The existing research on CoPs in HE has focussed on teaching and learning but none was conducted for the purpose of doing research. Hence, this research extends the CoP concept by applying it in a fresh context.

- Also, this research may lead to the emergence of a valuable mechanism to enrich research capabilities as well as to encourage and enhance research activities both at the individual, and by extension, at the organisational level. In essence, its findings will provide a better understanding of CoPs in HE and the benefits the CoPs' membership bestow on individuals and this has a great cascading effect because it will ultimately benefit universities.

1.10 ORGANISATION OF CHAPTERS

This thesis contains a total of seven chapters. The first chapter introduces the reader to what the thesis is about. It presents the background to the research, covering both the researcher's motivation to undertake this study and touching upon the theory and practice that shaped the research questions. The chapter also clarifies some terms used in this research as well as establish the research context and the scope of what is included or not included. Moreover, the aim of this research is stated and the methodology adopted was briefly explained. It finishes by pointing out the significance of this study.

The second chapter of the thesis delves more deeply into the current and past research literature on CoP that forms the foundation of this study. By critically examining the work that has been carried out in this area, the research question emerged as an important area that is yet to be examined in the field of CoP and HE. This chapter explores the nature of CoPs and its theoretical foundations, highlighting their characteristics and purpose within organisations. Then, it surveys other related literatures including perception and value to gain more understanding of the issue at hand. Consequently, it considers the notion of CoPs in the HE environment thereby identifying the gap and establishing the need for this study.

Chapter 3 considers the philosophy that grounds this research and the methodology employed. It points up the theoretical assumptions that underpin the research to ensure the soundness of this study. Also, it looks at the theoretical issues of the philosophical element and their practical implication and justifies the choices of methodology and methods adopted. It discusses the selection and application of the

methods used to answer the research question and explains why other methods were not used. Chapter 4 details the research design and its issues, explicating where the research was conducted and how it was executed. Additionally, the analysis approach and the process adopted to arrive at the findings are explained.

Chapter 5 presents findings in relations to individuals' perception of the values and impact of their membership in research-based CoPs and Chapter 6 draws the whole research project and findings together. It discusses the results obtained from the study, synthesising and integrating the findings with the literature to draw conclusions in Chapter 7. This final chapter recaps the research; presents the conclusions and provides indicator for future practice and research. So far, this chapter has set up the context and the research question that this thesis addresses and laid down briefly each chapter to set the scene of this research. The rest of the chapters will study and justify this research in further detail.

CHAPTER 2

LITERATURE REVIEW

2.1   INTRODUCTION

Chapter one has introduced the research, briefly touching the research questions and the related areas of previous research. This chapter presents the literature in more detail, covering the supporting research and opinion that have shaped and refined the research question as well as the data gathering and analysis phases.

The literature review will be discussed in three phases to outline the theoretical background of this research. Firstly, it outlines the assumptions, principles and characteristics of the CoP concept. When explaining the concept, situated learning and reflective practice theories are introduced as the theoretical foundations for environments like CoPs to demonstrate the situated learning in social practice. Also, because learning is not merely situated in practice but as an integral part of practice (Lave and Wenger, 1991), supplementary frameworks such as legitimate peripheral participation (LPP) and participation have been used. Secondly, it outlines the perspective and the context of perceived value this research takes. It also discusses the subjectivity of value; the roles value plays to determine members' participation and practice and how to surface them. When describing the perceived value, the literature will look into the benefits and values of CoPs' membership mentioned in past research conducted in various sectors, constructed from individual's perspective. Thirdly, the chapter closes by looking into the research environment in HE, how

universities and individuals have responded to it and how the CoP concept can be applied into the research environment of the HE sector.

Past research on CoPs revealed that there is lack of research in the HE sector as it is taken for granted that they are practitioners of knowledge and knowledge sharing is part of their duties and responsibilities. Moreover, past research has been centred on the contributions or benefits of CoPs toward organisational knowledge and its bottom line but less research has been conducted to study on the benefits towards individual. Therefore, this study attempts to fill this gap and thereby focussing on individuals' perception of the values and impacts of research-based CoPs' membership in HE.

Overall, the main theoretical framework of this research is the CoP concept, focussing on its central tenets to give an understanding of the properties and characteristics of CoPs. It describes how individuals participate in CoPs to create value from its membership and informs the researcher on how to critique the research data. On top of that, to further understanding on how individual's make sense and construct value in their participation, this research has borrowed other theories that are relevant such as perception and value to supplement the CoP concept. Hence, the CoP concept serves as the focal framework and other theories are sourced and reviewed for inclusion to support and ground further analysis in the overall study.

2.2 COMMUNITIES

The concept of communities is not new. Since olden days, hunters and gatherers relied on communities to transfer knowledge in order to survive (Berreby, 1999). This goes back to the time when people lived in caves and gathered around the fire to

discuss survival strategies and they were the first knowledge-based social structure (Wenger *et al.*, 2002a). During the classical Greece and in the middle ages times, craftsmen and guilds come together for both social (they worshipped and celebrated together) and business purpose (they train apprentices and share best practice) (Wenger *et al.*, 2002a; Wenger and Snyder, 2000). However, as people move from subsistence living into the industry era, guilds lost their influence during the Industrial Revolution but communities have continued to flourish to today in every aspect of human life (Berreby, 1999; Wenger *et al.*, 2002a).

Simply defined, communities are made of people in townships. Philosophically, it expresses individuals' yearnings for a common desire and a relationship with others (Minar and Greer, 1969). It is used to communicate different meanings that include locality, social activity or as social structure (Clark, 1973). For example, it indicates either where people live, how they live or in what ways they are different from other groupings. Poplin (1979) builds on this concept, coming from a 'moral' phenomenon perspective to say that it involves a sense of identity and unity with their group, giving individuals a feeling of involvement and wholeness. This supports the work of MacIver (1924) on studying community as a sentiment suggesting a sense of solidarity and of significance where individuals feel the sense of belonging and in some ways contributing to the whole so as to derive a sense of self worth. In short, community can only exist when people have certain intentions toward one another and value one another in certain ways (Plant, 1978). They tend to associate their sentiments with the values they most cherished and this sense of community creates a condition in which individuals find themselves enmeshed in a

tight-knit web of meaningful relationships with others (Poplin 1979), living together, working together, experiencing together and being together (Nisbet, 1960).

Communities are everywhere and individuals belong to a number of them, whether at work, at school or at home. Some have a name but some do not and some are recognised whereas some are undetectable. Individuals can become core members in some and may be irregular in others. Regardless of the forms of their participation, they are familiar with the experience of belonging to a community (Wenger *et al.*, 2002a). However, today's communities are different in one respect as they exist within workplace in large organisations where individuals exchange knowledge within them (Wenger and Snyder, 2000). This has gained much attention from knowledge management researchers in recent years. The following sections will explore communities in the organisational context and in particular paying attention to organisational community which provides an environment for learning i.e. the Community of Practice (Lave and Wenger, 1991).

2.3   COMMUNITY OF PRACTICE (CoP)

The term "community of practice" is most closely associated with the collective work of Lave and Wenger (Lave, 1988, 1997; Lave and Wenger, 1991; Wenger, 1998b). They first introduced the CoP concept describing them as

> *a set of relationships among persons, activity and world, over time, in relation with other tangential and overlapping communities of practice.*
> (Lave and Wenger, 1991:98)

Over time, Lave and Wenger have refined their definition of CoPs as they have done more research on these entities. A more recent definition of CoPs is

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groups of individuals informally bound together by shared expertise and passion for a joint enterprise.

(Wenger and Snyder, 2000:139)

These definitions suggest that a CoP involves the participation of a collection of individuals sharing mutually defined practices, beliefs and understandings over an extended timeframe in the pursuit of a shared enterprise (Wenger 1998b). They have a shape and membership that emerges in the process of activity, as opposed to being created to carry out a task (Brown and Duguid, 1991). However, since Lave and Wenger (1991) first used the term CoP, a range of definitions with many shades has been developed but all allude to the value of informal organisational learning and sharing. Some of definitions of CoPs by leading theorists are:

A CoP is defined as a group or a network of professionals, informally and contextually bound to one another by a shared interest in learning and applying a common practice (Snyder, 1997).

CoPs are groups of professionals, informally bound to one another through exposure to common class of problems, common pursuit of solutions and thereby themselves embodying a store of knowledge (Johnson-Lenz and Johnson-Lenz, 2000).

CoPs are the informal groups that exist outside the formal hierarchies (Lave and Wenger, 1991) and they share a passion for something that they know how to do and who interact on a regular basis to learn how to do it better (Wenger, 2003). They create, expand and exchange knowledge and develop individual capabilities (Wenger and Snyder, 2000).

CoPs are groups of people who work and play together; who share similar goals and interests; and when in pursuit of these goals and interests, they employ common practices, work with the same tools and express themselves in a common language, thereby come to hold similar beliefs and value systems (CoVis Project, no date).

CoPs are peers in the execution of 'real work' (Brown and Gray, 1995). They are the shop floor of human capital, the place where the stuff gets made (Stewart, 1996).

CoPs are groups that learn and emerge on their own accord, drawn to one another by a force that is both social and professional to collaborate directly, using one another as sounding boards to teach each other (Stewart, 1996).

A CoP is a made up of a diverse group of people who develop their competence, either out of pleasure or pride in their ability or as a way to making their jobs easier (O'Hara, Alani and Shadbolt, 2002). They are where learning and innovation occur through open participation in the creation and exchange of knowledge evolving a practice that is highly skilled and highly creative (Stewart, 1996).

A CoP is a special type of informal network that emerges from a desire to work more effectively or to understand work more deeply among members of a particular specialty or work group (Sharp, 1997).

A CoP is a self-organising group that might be contained within one organisation or spread across several, and they have no agenda; they are defined by the subject that engages them, not by project, rank, department or even corporate affiliation (O'Hara et al., 2002). What holds them together is a common sense of purpose and a real need to know what each other knows (Brown and Gray, 1995).

Summing up the definitions above, CoPs can be seen as informal and self-organising networks. They have come together by exposure to common problems, common sense of purpose and common practices and language for the purpose of learning and developing more creative practice. At the simplest level, CoPs are a small group of people who have worked together over a period of time (Sharp, 1997).

The two key words in the term provide a suitable way to unpack the meaning of this complex, emergent construct. "Community" refers to the informality and personal basis of relationships in a typical CoP (Snyder, 1997). It highlights the importance of quasi-voluntary interaction (Wenger, 1996). As for "practice", it indicates that at the heart of CoPs is the shared practice which may or may not coincide to a formal function in the organisation (Snyder, 1997). It also implies active engagement of

members in its activities (Wenger, 1996) and it also suggests that CoPs' boundaries are practice-based or person-based network that may not correspond to the organisational boundaries (Snyder, 1997). Therefore, the term suggests that what brought these individuals together is the practice they have in common or the sense of calling, professionally (Argyris, Putnam and Smith, 1987; Leonard-Barton, 1995; Schon, 1987) and the main source of connection among them is something that they know how to do (Wolf, 2003). Together the terms community and practice refer to a very specific type of social structure with a very specific purpose.

Hence, from the above, for the purpose of this research, the working definition of CoPs is

> *groups of individuals who are self-organising and informally bound together by a common sense of purpose or practice, who meet and interact regularly to exchange knowledge and to learn from each other.*

This definition will be further refined to account for the context of this research towards the end of the chapter.

However, it is argued that not every community is a CoP as defined by Wenger *et al.* (2002a). They are different from other kinds of groups found in organisations in the way they define their enterprise, their existence over time and their boundaries. The following, as identified by Wenger *et al.*, (2002a) will provide some contrasts with other more familiar structures to help clarify CoPs' distinctiveness.

- CoPs are different from formal departments as the latter are formal functional units bound together by reporting relationships within organisational hierarchies who are responsible for working towards business goals. They are brought

together because of job requirements and common goals and these units are intended to be permanent until the next restructuring in the organisation (Wenger *et al.,* 2002a). By contrast, the primary purpose of CoPs is to develop knowledge (Wenger, 1998b) and they focus on learning, sharing insights, solving problems collaboratively and stimulating new ideas (McDermott, 1999a). They exist outside the formal hierarchies and are loosely connected, informal and self-organising. CoPs are driven by the value they provide to members and membership is voluntary and it involves whoever participates in and contributes to the practice (Wenger, 1998a). Additionally, relationships are based on collegiality instead of institutional affiliation (Wenger *et al.*, 2002a).

- CoPs also differ from formal project teams because the latter are created to carry out a specific task and members are selected by management on the basis of their ability to contribute to the team's goals (Wenger and Snyder, 2000). When the task has been completed, it disbands (NeLH, no date). On the other hand, CoPs rarely have a specific result to deliver to organisations (McDermott, 1999a). Membership is self-selected or by invitation (Newell *et al.*, 2002) and they establish their own leadership (Wenger, 2004). They set their own agendas and these are usually defined by their knowledge and common interest rather than by task (Wenger, 1998a). A CoP is open-ended (Newell *et al.*, 2002) as it does not appear when a project is initiated and does not disappear when a task is finished. Additionally, it takes some time to come into being and can last as long as there is interest in maintaining the group (Wenger and Snyder, 2000).

- Also, CoPs are not similar to informal networks as the latter are collections of any individuals who perceive themselves to be a group and they inevitably exist in all organisations (Krackardt and Hanson, 1993). They include workplace cliques and networks of individuals who regularly get together to communicate and exchange information as well as build relationships and socialise outside work (BPP, 2000). These relationships are built based on proximity, personal attraction, mutual needs and common backgrounds among its members (Sharp, 1997) and they can last as long as individuals keep in touch or have a reason to connect. A CoP is different in the sense that it is not just a set of relationships but it has a shared interest that shapes the identity of its members (Wenger, 1998a). Individuals are committed to care for their common interest and this gives the CoP cohesiveness and intentionality that goes beyond informal networks (Wenger *et al.,* 2002a). Moreover, it produces a shared practice that develops members' knowledge and allows them to perform better in their other tasks (Wenger, 1998a).

From the above, CoPs are indeed different from these other groups. They are not a team or a task force and they are not authorised groups or identified on an organisation chart (Sharp, 1997; Whiffen 2001). Individuals are connected through similar knowledge needs and they are not merely peers exchanging or sharing ideas and benefiting from each other's expertise, but are colleagues committed to jointly develop better practices (Por, 2003). Table 2.1 summarises these comparisons and all these distinctions exist in varying degree and they are not black and white.

	What is the purpose?	Who belongs to it?	What holds it together	How long does it last
Community of Practice	To create, expand and exchange knowledge; to develop members' capabilities	Members self-select based on expertise or passion for a topic	Passion, commitment and identification with the groups' expertise	Evolve and end naturally (as long as there is interest in maintaining the group)
Formal Departments	To deliver a product or service	Everyone who reports to the group's manager	Job requirements and common goals	Intended to be permanent until the next restructuring
Project Teams	To accomplish a specified task	Membership assigned by management made up of people who have a direct role in accomplishing the task	The project's goals and milestones	Ongoing but disband once the project is completed.
Informal Networks	To collect and pass on information	Friends and business acquaintances	Mutual needs and relationships	As long as people keep in touch or have a reason to connect

(Adapted from Wenger *et al.*, 2002a; Wenger and Snyder, 2000)

Table 2.1: Summary of Comparisons Between CoPs and Other Groups

CoPs can exist in a variety of forms and they vary widely in terms of name and style in different organisations. The following are examples of the different types of CoPs and the fundamental characteristics they have in common (Wenger *et al.*, 2002a).

- CoPs exist in different sizes as they can be small and intimate, consisting of only a few experts while others can be as large as hundreds of individuals. Size is a matter because on one hand, a critical mass of people is necessary to maintain regular interaction and to offer various perspectives while on the other hand, if it gets too large it prevents direct contact (Wenger *et al.*, 2002a). Hence, it is essential to have an active core group to attract more individuals into it and when they grow beyond a certain size, they naturally evolve into sub-groups that can be structured differently e.g. by geographic region or by subtopic, to encourage members to take part actively. Essentially, the main purpose is to increase the intensity of conversation at the level of the core groups and connect the sub-groups with one another (Wolf, 2003).

- In order to share a practice, there need to be regular interaction between members. They can meet regularly e.g. once a month or fortnight, or they can connect through email or other medium of communication. This means that members can meet face-to-face or they interact virtually as some may be collocated, working at the same or different workplace and live nearby but at the same time some are distributed over different cities and time zone (Ardichvili *et al.*, 2003; Lesser and Everest, 2001; McDermott, 1999b). Whatever it is, collocation is not a necessity and no matter in what way they connect, their aim is to share knowledge or share a practice (Wenger *et al.*, 2002a).

- Communities can be homogenous, composed of people from the same discipline, function or background, they are specialised in various areas and they interested in a same topic or problem. As well, they can be heterogeneous, made up of individuals from different functions who come together to solve a common problem (Brown and Duguid, 2001a). Initially, it is often simpler to start a community among people with similar backgrounds who have a problem in common. However, in heterogeneous communities, the motivation to initiate it is the fact that they can build and share a practice even among people from different backgrounds. Eventually, as they engage with each other, they build relationships that knit them closely to each other (Wenger *et al.*, 2002a).

- The boundaries of CoPs are fuzzy and they can live within or across divisional/organisational boundaries (Brown and Duguid, 1991; Lesser and Everest, 2001, Swan, Scarbrough and Robertson, 2002). Within divisional boundaries, CoPs can occur when individuals try to solve a similar problem

together. At the same time, CoPs can arise across divisional boundaries where individuals keep in touch with colleagues in various business units to share and maintain their expertise since organisational knowledge is often distributed throughout different functions. Given their capacity to cross boundaries, CoPs are not only bound within an institution. In fact, they cross organisational boundaries especially with the trend moving towards extended enterprise where related organisations work together to keep up with changes in their business environment (Wenger *et al.*, 2002a).

- CoPs can start spontaneously, without any involvement or development effort from the organisation (Brown and Duguid, 2001b). Members just come together in their own accord because of mutual needs or commitment. Alternatively, they can be initiated intentionally by organisations to steward a specific capability (Lesser and Everest, 2001). In any way, this does not dictate CoPs' level of formality as some highly dynamic and established communities are very informal while others can be highly structured by having meetings, setting agendas and creating specific objectives (Wenger *et al.*, 2002a).

- The relationships of CoPs to organisations can range widely from completely unrecognised to largely institutionalised (Brown and Duguid, 1991). Individuals meet regularly and discuss specific issues and over a period of time they share and build knowledge that can help them to perform better in their formal workplace. However, members or organisations may not be explicitly aware of this and they may not recognise the impact of these CoPs. On the other hand, some communities have been discovered to be valuable and they are incorporated

into the formal structure of the organisation (Gongla and Rizzuto, 2001; Thompson, 2005). This institutionalisation can offer legitimacy and provision of resources to the CoPs. However, it needs to be well managed so that it does not violate its internal drive. Therefore, between the two extremes of relationships, there is a whole range of possible relationships and different issues arise as the relationship changes (Wenger *et al.*, 2002a).

In summary, CoPs exist in some form in every organisation and the challenge is to identify them (NeLH, no date). Knowing these different types of CoPs is helpful because it enables people to recognise them as they are known in different guises and names such as "tech clubs," "learning networks," "knowledge communities," "interest groups," "knowledge centres," "invisible colleges," "occupational communities," "communities of practitioners," "communities of knowing" among others (Argyris *et al.*, 1987; Boland and Tenkasi, 1995; Crane, 1972; Van Maanen and Barley, 1984; Wenger *et al.*, 2002a). Therefore, CoPs are diverse depending on the situation in which they exist and the individuals who make up them. However, regardless of the forms that CoPs take, they all share a basic structure (Wenger *et al.*, 2002a) and this is further explained in the following section.

2.3.1 CoP structure

A CoP is a unique combination of three fundamental elements: a domain of knowledge (joint enterprise or shared interest) which defines a set of issues; a community of people (mutual engagement or relationships) who care about this domain; and the shared practice (shared repertoire) that they are developing to be effective in their domain (Wenger, 1998b; Wenger *et al.*, 2002a).

2.3.1.1 Domain

A CoP is not just a collection of people as they must have common ground (Clark, 1996) and this provides a means of defining themselves (Wenger *et al.,* 2002a). This is because members organise themselves around a domain of knowledge that gives them a sense of joint enterprise which brings them together (Allee, 2000) and a sense of common identity (Wenger *et al.,* 2002a). They identify with the domain and a joint responsibility that come out from shared understanding of their situation (Allee, 2000). In this regard, it suggests that the concept of community often implies commonality but it cannot be assumed that this is the main characteristic of an ideal CoP. This is because as members interact, apart from creating commonality, CoPs also encourage differentiation among members. It is just that due to their homogeneity in terms of background or point of view, it makes it easier to start a CoP but it is not a pre-requisite (Wenger *et al.,* 2002a).

Hence, fundamentally, a domain defines the scope of a CoP and it can be either based around a professional discipline or on some specific problems or opportunities (NeLH, no date) that may take the form of shared knowledge, expertise, procedures, beliefs, language, background and even ineffable experiences. Clark (1996) offers an example of the shared background of a downhill skier. Members of this community all know the experiences shared by each other, for example the feeling of wind in the face, the different snow textures beneath the skis and how to respond to the different surfaces. These are experiences that non-members cannot understand until they have themselves experienced them because know-how or tacit knowledge is facts that cannot be recorded.

Apart from defining its scope, a well defined domain legitimises a CoP by affirming its purpose and value to it members and other stakeholders. Given this, members can decide what is interesting and worth sharing; which activities to purse; and how to present their ideas in ways that others will find it relevant. This allows members to recognise the potential in tentative ideas which inspire them to contribute and participate thereby guiding their learning and giving meaning to their actions (Wenger *et al.*, 2002a; Wenger and Snyder, 2000). Hence, it is an insider's view of the domain that shapes the knowledge, value and behaviour of members to which they hold each other accountable. This view is not easily expressed and an outsider may not be able to appreciate why sharing a certain detail is important to the story.

2.3.1.2 Community

This element refers to the pattern of interaction among members of the community (Wenger *et al.*, 2002a). Individuals unite as a community through relationships of mutual engagement that bind them together into a social entity (Allee, 2000). They interact regularly and engage in joint activities that build relationships based on mutual respect and trust (Whetten, 2001). Through these interactions and doing things together, they shape the group's culture and its practices. Hence, these interactions must have some continuity so that members can interact regularly on issues important to their domain and in doing so, they build relationships that are pertinent to allow them see the connecting thread among themselves and to foster the sharing of ideas. Over time, they build valuable relationships and a sense of common history and identity (Wenger, 1998b). Therefore, mutual engagement in a CoP is vital because without interaction, it is impossible to form (Whetten, 2001).

2.3.1.3 Practice

Practice denotes the ways things are done in a specific domain. It is a set of common approaches and shared norms that serve as a base for members' action, communication, problem solving, performance and accountability. In other words, this is the specific knowledge the community develops, shares and maintains and this includes explicit as well as tacit aspects of the community knowledge (Wenger *et al.*, 2002a). In view of this, CoPs build capability in its practice by developing a shared repertoire that can take the form of tools, documents, routines, vocabulary, symbols, artefacts, etc. (Allee, 2000) or it can also take the form of less tangible resources such as a certain way of behaving, a perspective on problems and ideas or a thinking style. Through mutual engagement and over a period of time, members are expected to have mastered the basic knowledge of the community and this will enable the community to proceed efficiently in dealing with its domain. This is because members can debate and explore existing body of knowledge and the latest advancement in their field. Therefore, as the community develops an effective practice evolves and it organises knowledge in a way that is especially useful to members because it reflects their perspective (Wenger *et al.*, 2002a). In this sense, a practice is a sort of mini-culture that binds the community together.

In summary, these three elements (as illustrated in Figure 2.1) clarify the definition of a CoP compared to other social structure. Apart from that, they also represent different aspects of participation that motivate people to join a community and it also provides a means to understand the different ways in which participation is meaningful to members. Some individuals participate because they care about the domain and want to see it developed while others are drawn by the value of having a

community, looking to interact with individuals who share their passion or there are

members who are simply interested to learn the best practices or standards of their

profession. In essence, when these three elements function well together, they make

an ideal CoP as they guide the efforts to community development, indicating the

various areas that need to be focussed (Wenger *et al.*, 2002a).

•negotiated enterprise

•mutual accountability

•interpretations

•local response

•rhythm

joint enterprise

mutual engagement

shared repertoire

•social complexity

•doing things together   •relationships

•community maintenance

•engaged diversity

•stories   •discourses

•styles   •historical events

•concepts   •actions

•artifacts   •tools
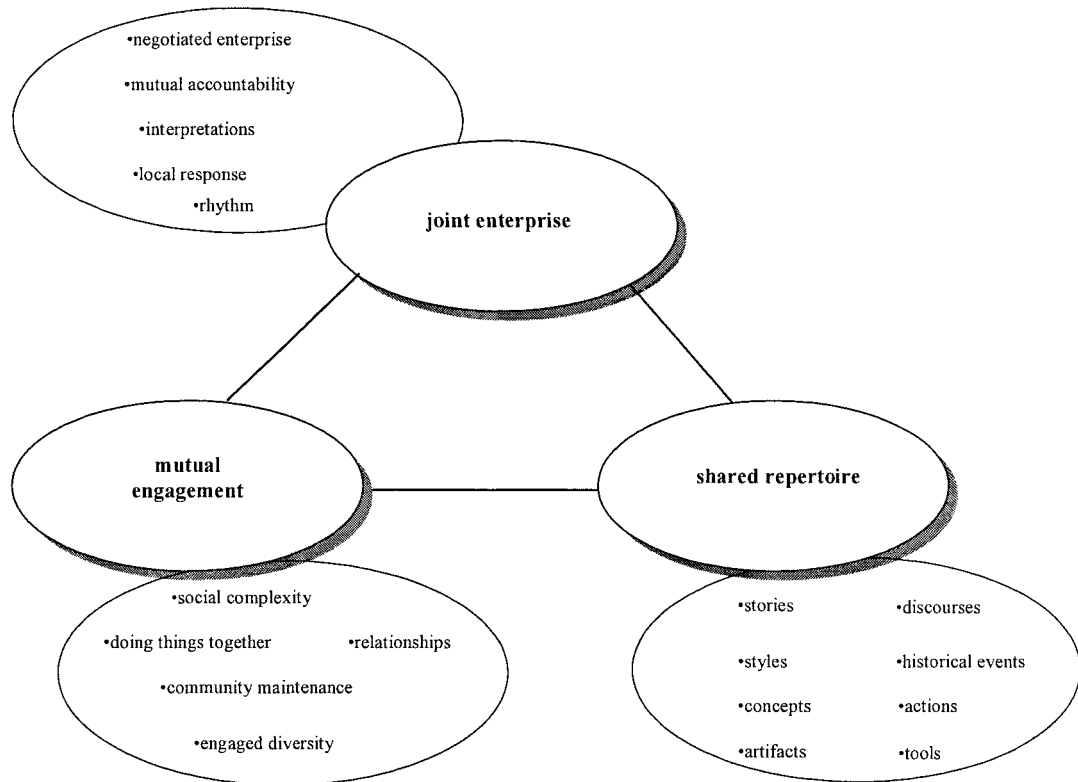
Source: Wenger (1998b)

Figure 2.1: Dimensions of Practice as the Property of a Community

2.3.2   Theoretical foundation of CoPs

The CoP framework is based on two central tenets: (a) knowledge is situated in

experience and (b) experience is understood through critical reflection with others

who share this experience. The two theoretical frameworks that have informed these

tenets are situated learning and reflective practice (Buysse *et al.,* 2003).

2.3.2.1 Situated learning

Situated learning is essentially knowledge obtained from and applied to everyday situations (Hummel, 1993). Heidegger (1996) defined situation as the participant's context, including the physical surroundings, the available tools, the circumstances surrounding the task at hand and the participant's own personal or professional aims. Therefore, situated learning takes as its focus the relationship between learning and the social situations in which it occurs (Hanks, 1991). Situative theories emphasise the reciprocal character of the interaction in which individuals, as well as cognition and meaning, are considered socially and culturally constructed (Lave, 1988, 1993; Michael, 1996). They tend to characterise learning in terms of more effective participation in practices of inquiry and discourse that include constructing meanings of concepts and uses of skills (Greeno, 1998). This means that as a framework for understanding how learning occurs, situated learning is considered a socio-cultural phenomenon, rather than an isolated activity in which an individual acquires knowledge from a de-contextualised body of knowledge (Barab and Duffy, 2000). In other words, learning is seen as socially situated, focussing on the social practice rather than privileging the structure of pedagogy as the source of learning (Lave and Wenger, 1991).

This is also supported by the work of Brown, Collins and Duguid (1989), who argued that knowing and doing are reciprocal and knowledge is situated and is progressively developed through activity where Greeno (1998) referred to as a continual negotiation with others and with the resources of their environments. Viewed from the situative perspective, Greeno further asserted that all arrangements of activity provide situations and practices in which learning occurs and all learning

occurs in some situation. The difference between learning in different arrangements is not whether learning is situated or not, but how it is situated. Therefore, this places emphasis on the aspects of contexts that emerge in activities, the interactive constructions of individual's understanding and their engagement in these activities. This includes their contributions to group functions and their development of individual identities. In regard of this, situated learning embraces that activity and perception precede conceptualisation, as opposed to the other way around (Carr, Jonassen, Litzinger and Marra, 1998). Fundamentally, they focus on the social engagements that provide proper contexts for learning to take place (Hanks, 1991).

However, it should be noted that situated learning is different from other experiential forms of acquiring knowledge. According to Stein (1998), situated learning theory is associated with several major premises that differentiate them:

- Learning is grounded in daily activities and cannot be separated from the complex environments in which knowledge must be applied.

- Knowledge is acquired through experience and transfers only to similar situations.

- Learning is the result of social processes that require negotiation and problem solving with others.

In view of this, CoPs reflect this situated learning perspective in several important ways. In a CoP, shared inquiry and learning are centred on issues or problems that emerge from actual situations in genuine practice settings (Lave and Wenger, 1991). The CoP is a focus for situated learning because as members engage with each other, they share war stories about their experiences and spread best practice in various

informal ways. Effectively, they discover how best to practise and how best to integrate their practice with other aspects of their working or private lives. In so doing, CoPs help members to reflect their practices and avoid the effort of relearning what others have already learned (Orr, 1987; Smith and Farquhar, 2000). Therefore, members acquire skills to perform by actually engaging in the process (Hanks, 1991) and in this sense, learning is a process that takes place in a participation framework, mediated by the differences of perspectives among co-participants. This means that learning is not in an individual mind; it is distributed among members and not a one-person act; and it occurs within the context of social relationships with other members of the community who have similar issues and concerns from the realm of practice (Buysse *et al.*, 2003).

2.3.2.2 Reflective practice

From the above, it is seen that ongoing reflection with others about the intersection of knowledge and experience is one of the foundation of the CoPs' approach. As argued by Huxley (1972), facing real problems alone is not sufficient because experience is not what happens to individuals but it is what individuals do with what happens to them. This means that an action must be accompanied by reflection on action and more importantly on the outcomes of those actions (Kegan, 1982; Revans, 1983). Therefore, reflection refers to the ongoing process of critically examining current and past practices to improve future practices and to increase knowledge (Han, 1995; Hatton and Smith, 1995; LaBoskey, 1994).

Moreover, reflection is an active process of increasingly organising the relationship of self to the environment (Kegan, 1982) and it is most effective when it involves

others who can provide a view from outside the existing frame (Dixon, 1999). This is because reflective practice is predicated on the assumption that knowledge is derived from individuals' own experience and observations as well as from formal knowledge gained through theory and research, and that each informs the other. Therefore, reflection requires individuals to stand back from their work, to consider the values and principles underlying their practices (Fenichel, 1991). This means that the reflective process is an active, rigorous and analytical process and it is essential to the construction of meaning and the quality of learning. So, the opportunity for reflection must be central as individuals can think about why they are doing what they are doing and even to gather evidence to evaluate the efficacy of their actions. Additionally, it allows them to correct misconceptions and fill in where understanding was inadequate (Clift, Houston, and Pugach, 1990; Schon, 1987).

In a CoP framework, members engage with each other through collaborative activities to analyse problems or to consider alternative viewpoints. Via this interactive inquiry members reflect collaboratively and in doing so, the knowledge generated would be used to extend members' understanding and demands of their work situations (Buysse *et al.*, 2003). Ideally, by reflecting on their experiences with other members from diverse expertise who are gathered for a common purpose, it offers a unique opportunity to develop new insights and to identify common values and philosophies to guide and improve their practice. This enhances knowledge generation and scaffolding which is the core principle of a CoP (Pugach, 1999).

In summary, central to the CoP concept is the argument that learning involves more than acquiring understanding. Instead, it involves building an increasingly rich

implicit understanding of the world in which they practice and of the practice themselves (Brown *et al.*, 1989). This understanding is framed by those situations in which it is learned and used (Barab and Duffy, 2000). In other words, this process involves 'learning by doing' (Wenger, 1991), where members are placed in realistic, contextualised problem solving environments (Blumenfeld, Soloway, Marx, Krajcik, Guzdial and Palincsar, 1991) and they construct knowledge by solving complex problems in situations in which they use cognitive tools, multiple sources of information and other individuals as resources (Brown *et al.*, 1989; Resnick, 1987). At the same time, it is imperative that individuals reflect on the perspectives that inform their enterprises. In essence, situated learning does not prevent members from coming together but it does alter their reason for being together because the purpose is not only to learn from each others but to reflect together on their own actions (Dixon, 1999).

In further explaining situated learning, Lave and Wenger (1991) argued that the situatedness of activity is not as simple as an everyday activity or experience based learning as they saw the learning that took place in such communities, not as narrow situated learning and further claimed that learning is about the relational character of knowledge and learning, about the negotiated character of meaning and about the concerned nature of learning activity for the people involved. This means that there is no activity that is not situated and it emphasises that comprehensive understanding involves the whole person rather than receiving a body of factual knowledge about the world. In other words, it places importance on the activity in and with the world as well as on the view that individual, activity and the world mutually constitute each other (Lave and Wenger, 1991). In this regard, Lave and Wenger conceptualised

knowledge as a social and collective phenomenon embodied in the actions of practice of its member and they explored this process through studying how new members to various professions participated in the practice of the their community and gradually move from peripheral to full members of the CoP over time. More specifically, they introduced this way of integral learning as legitimate peripheral participation (LPP) which will be discussed in the next section.

2.3.3 Legitimate peripheral participation (LPP)

Lave and Wenger (1991) highlighted that LPP is not a form of educational strategy nor is it a teaching technique. It is also not merely learning situated in practice but learning as an integral part of practice. Essentially, it is a way to look at learning, a way to consider and comprehend learning. To explain LPP, Lave and Wenger used examples of professional communities (midwives, tailors, quartermasters, butchers and alcoholics) and the way in which meanings, beliefs and understandings were negotiated and reflected in certain practices, through an anthropological lens. They emphasised the notion of apprenticeship and stressed that it is not restricted to the traditional idea of apprenticeship in a trade but as a form of socialisation into a community where the newcomer gradually becomes a legitimate member of the CoP by learning the practice, the language and the conventions of the community and by having access to and interacting with established members. Therefore, the emphasis is on the social as opposed to information and knowledge.

In this regard, learning is achieved through a process of integration within the community, following a "from the outside in" pathway: the route of legitimate peripheral participation (LPP) enabling novices and experienced workers to share

sense-making processes (Lave and Wenger, 1991; Weick, 1995). Members enter a community at the periphery and over time move closer to full, legitimate participation as they gain knowledge and learn the community's customs and rituals and adopt a view of themselves as members of the community. In this sense, the notion of participation dissolves the dichotomy between mental and physical activities, between the abstract and experience (Catino, 1999) and LPP entails the progressive involvement of novices in the community as they acquire growing competence in their practice (Gherardi, 2000).

Additionally, this also implies that LPP is complex and composite in character and each of its three components of legitimation, peripherality and participation are vital in defining each other and cannot be considered separately i.e. legitimate versus illegitimate, peripheral versus central, participation versus non-participation (Lave and Wenger, 1991). This is because all three aspects create a background of community membership and they are intended for the concept to be taken as a whole. For instance, legitimacy of participation defines the ways of belonging and is therefore a constitutive element of learning its content where it emphasises the route through the various stages of learning connects with the community's actual practices. As for peripherality, it suggests that there are multiple ways of engaging in the fields of participation and peripheral participation is about being located in the social world where it denotes the degree of engagement with and participation in the community. In essence, peripherality is connected to issues of legitimacy of the social organisation and control over it as it denotes the route that the new member must follow to gain the esteem of the communities' established members (Gherardi, 2000; Lave and Wenger, 1991). Therefore, as members participate in these

communities, they change their locations and perspectives of their learning trajectories, develop their identities and forms of membership. In effect, this shifts the emphasis from individual's learning contexts to a focus on what it means to learn as a function of being a member (Barab and Duffy, 2000).

In a CoP, learning is closely associated with the understanding of a practice as it involves becoming a practitioner rather than learning about practice (Brown and Duguid, 1991). Moreover, members can participate in different ways and to different degrees and this permeable periphery creates opportunities for newcomers to learn the practice in real terms and core members gain new insights from contacts with less-engaged participants. This means that newcomers learn from established members by being able to participate in certain tasks relating to the practice of the CoP and gradually move from peripheral to full membership in that community while established members obtain new ideas to extend their existing knowledge and reflect on their practice. This process allows views to be shared and critiqued and it permits members to internalise, reflect on and extend their emergent knowledge and revise their artefacts (Blumenfeld *et al.*, 1991; Toulmin, 1972). In doing so, as time passes, newcomer's identity transforms both individually and in the eyes of other members, to one of full participation. More specifically, individuals moved from learning how to reflect on practices, to expanding their own experiences as members, to becoming a community in which every member contributed knowledge and was transformed through participation (Buysse *et al.*, 2003). Hence, in this sense, learning is situated in the culture of the community and the degree of participation in it is inseparable from practice since learning is seen as the historical production, transformation and change of persons (Lave and Wenger, 1991).

In summary, learning consists of the progressive integration into a CoP through centripetal participation in the situated practice of a given community (Gherardi, Nicolini and Odella, 1998; Lave and Wenger, 1991). This pathway to learning followed by the new comers will create an effective means for their socialisation and integration within the community. Moreover, the effect of the LPP approach is that members are motivated to persist at genuine problems, meld prior knowledge and experience with new learning and develop rich domain-specific knowledge and thinking strategies to apply to real-world problems (Blumenfeld *et al.*, 1991). Therefore, a CoP is seen as an intrinsic condition for the existence of knowledge and participation in the cultural practice (Lave and Wenger, 1991) and it implies that personal and group knowledge is integrated and distributed in the life of the community with learning as an act of belonging. This means that learning necessarily requires involvement in and contribution to the community's activity and development and learning cannot take place if participation is not possible (Gherardi, 2000) because it is participation that provides the key to understanding a CoP (Lave and Wenger, 1991).

2.3.4 Participation

Participation refers to a process of taking part in some activity or enterprise and also to the relations to others that reflect this process. In this sense, it is both personal and social and it suggests both action and connection. This means that participation is an active and complex process which involves the whole person involving the body, mind, emotion and social relations (Wenger, 1998b). In line with Wenger's description, in this research, the term participation refers to the social experience of individuals and their active involvement in a CoP.

Individuals participate in a variety of CoPs and the forms that their participation takes may be different. In some cases, they may participate marginally while in others they may be central. Also, some will be relatively transitory or unimportant, while their participation in others may be a vital part of their lives (Greeno, Eckert, Stucky, Sachs and Wenger, 1999; Wenger, 1996). In any case, participation involves negotiating and interacting with others and individuals need to be seen as acting in the social world rather than just being part of it (Billet, 2001; Greeno, 1998). More specifically, they need to participate as a member of a given CoP and not only through the internalisation of knowledge coming from the outside (Catino, 1999). In this sense, members contribute to the domain that matters to them and to others, and that they in turn matter to that domain (Greeno *et al.*, 1999). In other words, they are interdependent (Billet, 2001).

Through engagement in these practices, members come to learn new knowledge, refine and reinforce what they have already learnt (Billet, 1998). This means that knowing is through these relationships and it is an act of participation in complex social learning systems (Wenger, 2000a). Essentially, individual participate on an ongoing basis so as to bring about continual learning as the CoP changes and as they change their degree of participation. In this way, members' identity emerges in the process of articulation and resolution of participation in these CoPs and the identity of each CoP emerges through its members' joint engagement in this process. Therefore, such participation shapes not only what members do but also who they are and how they interpret what they do (Wenger, 1999). It shapes their experience and also shapes the communities. Identity in this sense is an experience and a display of competence as individuals are in familiar settings and they experience competence as

well as recognised for their competence. Moreover, participation goes beyond direct engagement in specific activities with specific people since individuals belong to more than one CoP and this places the negotiation of meaning in the context of individuals' forms of membership in various communities (Wenger, 1998b).

As such, it can be a challenge to participate in CoPs as it requires a wide range of capabilities i.e. knowing how to communicate and how to interpret documents and other information sources to contribute skilfully in any community. This is especially crucial for a newcomer because in order to participate effectively in a CoP, it requires knowledge of the community's practice (social relations and practices) and involves an ongoing participation in the construction of new knowledge. Therefore, newcomers to a CoP must enter into this knowledge practice in order to participate. In this way, they learn in order to be able to participate, to contribute, to see their effect, to become particular kinds of people with particular capabilities (Greeno et al., 1999). Hence, members must have access to participation as the knowledge to be learnt has cultural and social geneses (Billet, 2001). Otherwise, it prevents participants from appreciating the significance of their contributions and harms both their satisfaction and their effectiveness (Greeno et al., 1999). This pointed out that only an insider can appreciate the value of CoPs' membership because they know the issues at the heart of the domain, the knowledge that is important to share, the challenges the field faces and the latent potential in emerging ideas and techniques. Moreover, an insider can know who the real players are and their relationships.

Therefore, the key is individuals continue to participate effectively in CoPs activities and it is argued that members will continue to join if they find participating in them to be valuable (McDermott, 1999a). This is strongly influenced by the relationships among members and their participation in the community's practice (Greeno, 1998). In view of this, communities need to create events, activities and relationships that help members perceive their participation and their membership to be useful and valuable. This is because every phone call, email exchange or problem solving conversation strengthens the relationships within the community and these activities are vital to allow members to build trusting relationships (Wenger *et al.*, 2002a). Additionally, trust is paramount and is the key to this process because it is the glue that binds members to act in a sharing and adapting manner (Hung and Nichani, 2002). When the relationships among community members are strong, the events have richer meaning and create value (Wenger, McDermott and Snyder, 2002b). It offers members a place of exploration where it is safe to speak the truth and ask difficult questions. This enables meetings to be intense, rich in content, engaging members in good discussions (Edmonson, 1996). Otherwise, members will hoard their experience and knowledge and will not bother with sharing with or learning from others. Hence, trust, familiarity and mutual understanding are requirements that are pertinent in sharing knowledge (Roberts, 2000) and in developing an effective CoP.

In summary, CoPs are driven by the values members get from it and membership is more than just being declared a member, participation is also necessary to appropriate the value of its membership (Wenger, 1998b, Wenger *et al.*, 2002a). This means that members must see that their participation is worth investing their

efforts in. However, due to the differences in individual's beliefs and values, differences in ways that people consider their own knowledge and the differences in their participation, the interpretation of what is beneficial is subjective (Billet, 2001). As a result, this leads to different experiences and outcomes of being a member of a CoP as well as the perceived values and impacts of its membership. Hence, before reviewing past research on the benefits or value of CoPs' membership, the following section (the second phase of the literature review) will clarify and address what is perceived value in the context of this research and how to surface them.

2.4 THE CONTEXT OF VALUE

Both in everyday speech and in philosophical literature, value can appear in three basic senses which often overlap and confused (Najder, 1975).

1. Value is what a thing is worth and something translatable into or expressible by some units of measurement or comparison that can be represented in numbers. For example, what is the value of money of this house? Value in this sense is quantitative and is not bound to any particular theory but is a semantically independent unit.

2. Value is a valuable thing or property (quality) and it is something to which valuableness is ascribed. For example, the value of somebody's actions or the value of somebody's behaviour. In this sense, value is considered to be qualities and they are attributive.

3. Value is an idea, principle or criterion which makes individuals consider given objects, qualities, or events as valuable and consequently, to ascribe to them value, positive or negative, in the sense of 2 above. For instance, in order to

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recognise charity as a valuable act, one has to consider charity a value. This means that it is the values in human life and the cognitive individual values that determine and make judgements. Value in this sense is axiological and is seen to be essential for the philosophy of value.

Najder (1975) argued that all three meaning of value mentioned above are interrelated and they overlap each other. This means that eliminating any one of them or allotting a special or separate term to one are meagre. This is because it is possible for the same statement to be interpreted as applying to value in different sense. Najder offers an example: the value of a particular house is £40,000 and the value of this house consists in its being the classical example of Kentish Gothic (an overlap of the meaning of value in the sense of 1 and 2). In addition, to complicate this further, in order to assess the value of its qualities and to ascribe value to the property, one must have at his/her disposal, the criteria (value in the sense of 3) which make such assessment and ascription possible.

From this example, it can be seen that axiological value affects individuals' perception of the world and their response to it as they will hold as ultimate personal values those goals and criteria which seem to them to be most closely in accord with what is real. Since each person's values are unique, his/her conception will differ from others. Apart from that, each individual's values change from one situation to the next, whether he/she is aware of it or not. Therefore, for each individual, reality is whatever his/her values allow him to recognise and specific facts, persons and events cannot be talked about or dealt with without considering the values that are placed on them by all parties involved. This means that axiological values are

subjective, in the sense that the individual attributes value to an object on the basis of how they feel about it. In this example, the quantifiable value of an object would not be necessarily determined by any of its inherent properties, but rather by the individual's reactions towards them (Kelvin, 1972).

As seen above, all three values overlap and influence each other. The above classification of values is intended as provisional and would certainly require amplification that this research cannot enter upon here due to time constraint and it is not the purpose of this research to do so. However, as suggested by Najder (1975), when using the term 'value', one need to clearly realise and indicate the sense in which they understand it. Therefore, for the purpose of this research, value is discussed and understood in the sense of something to which valuableness is ascribed (in the sense of 2). In particular, the perceived value that this research seeks to illuminate and to gain insight as outcomes of this research refers to the values (meaning and benefits) individuals ascribe or attribute to their participation in CoPs. This does not mean that the two other senses of value are discarded and rejected. They are as valid and inevitably influence individual's perception, and will be complementary when discussing individuals' perception of the values ascribed to their participation in CoPs, which is the focus of this research.

2.4.1   The meaning of value

Value is an ambiguous term and has been studied in many disciplines in different ways. For example, just to name a few, in mathematics, physics and biology, it indicates an amount or its ranking in a classification system; in economics, value is seen as the price of an object or service and is derived entirely from the psychology

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of market participants; in marketing, value is the quality of an action or object which makes up the consumption experience relative to an individual's needs at a particular time; and in moral and ethics, value refers to the principles or standards that people use, individually or collectively, to make judgement about what is important or valuable in their lives (McEwan, 2001, Wikipedia, 2005). Due to the ambiguity of the term 'value', this section seeks to indicate which perspective this research will take to represent value.

From the many disciplines that have studied value, as mentioned above, this research is borrowing the value concept from the marketing perspective, focussing on value in services marketing instead of product due to its similarity in characteristics with the nature of participation in CoPs i.e. intangibility, heterogeneity, simultaneous production and consumption. Also, it fits in best with the purpose and the philosophy of this research and is in line with the sense of value this research has set to study, as mentioned in the previous section.

Based on a synthesis of previous definitions, Woodruff (1997) defines value as a customer's perceived preference for and evaluation of those service performances, and consequences arising from use that facilitate achieving the customer's goals and purposes in use situation. This means that value is the worth of a specific action or object relative to an individual's needs at a particular time, context or situation (LeBlanc and Nguyen, 1999). It refers to what the outcome of the service interaction is, depending on the consumer and the service provider because it is through the service interaction, they create value and provide benefits for consumers at specific times and places, as a result of bringing about a desired change to the individual.

Many researchers have described individuals' evaluation of value as a function of the benefits or utility received in exchange (Lovelock and Wright, 2001) and they may derive value from all qualitative and quantitative factors which make up the consumption experience. The significance of Woodruff's conceptualisation of value over other definitions is because of: 1) the definition emphasises the multi-faceted nature of value creation in that both attributes and consequences of activities comprise perceptions of value; and 2) value is derived from the perspective of the customer or value recipient (Simpson, Siguaw and Baker, 2001).

Therefore, in the marketing context, value is both situational and personal and can take on different meanings at various phases of the consumption process (Holbrook and Corfman, 1985; Ziethaml, 1988). If the offer delivers enhanced performance or increased perceived benefits, then there is a clear added-value from the customer's perspective. When value added can be readily expressed and can be directly quantifiable, it is considered as direct value and when value added is less tangible i.e. improved relationships such as relation or social associations, they are considered to be indirect value (Simpson *et al.*, 2001). Thus, value is customer-specific and essentially subjective to the customer. It is the impact that the supplier's offer has on the customer's own value chain (Payne, Christopher, Clark and Peck, 1998).

In view of this, value is inescapably ambiguous (Laird, 1929; Najder, 1975) and the search for a precise definition of value has proven to be an arduous task for many researchers (LeBlanc and Nguyen, 1999). This is because there is no one universal value that is applicable in all contexts (Shetty, 2004) and it is a quality of things that is context- and subject- sensitive (Castro, 2003). It is a judgement of the thing's

usefulness in a given situation for a given person. This means that the same things may be of different value to two different people at the same time, depending on the perception of the individual. What is perceived as value by one may not be valuable to another. It is not absolute but relative and it depends on who is valuing or judging it and when. Therefore, value is a perception (Day and Crask, 2000) and the way it functions for an individual might be similar but is never the same as individuals perceive and see their world differently (Shetty, 2004). So, what is perception?

2.4.2 What is perception?

Perception is the process of acquiring, interpreting, selecting and organising sensory information. It is concerned with how events are observed and interpreted to form a meaningful picture of the world (FreeDictionary, 2004; Rock, 1975, 1983). Therefore, perception is the representation of what is perceived and is the basic component in the formation of a concept. In other words, it can be thought of as each individual's personal theory of reality, the knowledge-gathering process that defines his/her view of the world. Research has been conducted in this area because it is through perception that individuals get their information or impression about the environment toward which they behave (Newcomb, 1975) and this perceptual outlook guides their mental and behavioural activities (Sekuler and Blake, 2002).

This means that people attach meanings, interpretations, values and aims to their actions. What they do in the world depends on (a) how they understand their place in it; (b) how they perceive themselves and their social physical environment; and (c) how they perceive their circumstances, situations or needs, relating new concepts to pre-existing ones. In this sense, perception is a dynamic process because it involves

ordering and attaching meaning to raw sensory data and individuals are constantly

sifting and sorting this stream of information, making sense of it and interpreting it

(Huczynski and Buchanan, 2001), and as they acquire new information, their percept

shift (FreeDictionary, 2004). Hence, the issue is every individual perceive his/her

world in different ways because they differ greatly due to different social and

physical backgrounds, which give them different personal values, interests and

expectations (Dunnette, 1966; Stamps, 1997). In other words, different people see

things differently and human beings behave in the world not 'as it really is', but as

they perceive it (BPP, 2000). It is their personal perception of that reality which

shapes and directs their behaviour, and not the objective understanding of external

reality (Huczynski and Buchanan, 2001). Therefore, the interest is not in the

objective event but in how things appear to individuals and in the field of perception,

it is assumed that the world as individuals perceive it is no more and no less than the

world as it is and this is the position this research will adopt.

2.4.3   What is perceived value?

In marketing, perceived value is regarded as an individual's overall assessment of the

utility or usefulness of an action based on perceptions of what is received and what is

given (Ziethaml, 1988, Ziethaml, Parasuraman and Berry, 1990). At its most

fundamental it represents the perceived benefits that customers believe they receive

from consumption of a service (Payne et al., 1998). In other words, value refers to

the individual's concern with the benefit received in comparison to the sacrifice or

time spent on performing the activities (Tellis and Gaeth, 1990).

Perceived value has been much of a research topic because satisfaction depends on value (Ravald and Gronroos, 1996). Therefore, it is one of the most important drivers of customer satisfaction (McDougall and Levesque, 2000) and it has a direct impact on how satisfied customers are (Anderson, Fornell and Lehmann, 1994). Moreover, it influences individuals' future intentions and actions (Bolton and Drew, 1991) because in making the decision to return to the service provided, customers are likely to consider whether or not they received "value for money" (Westbrook and Oliver, 1991). Satisfied customers buy again and tell others about their good experiences (Armstrong and Kotler, 2005). Therefore, perceived value is an important contributor to customer satisfaction and is, in part, the totality of the purchase situation relative to expectations (Westbrook and Oliver, 1991).

Therefore, the value of anything depends on its fitness to supply the necessities or serve a particular need in a given situation (Danner, 1981). This is influenced by the value provider, the value receiver and its external elements. This means that there is no objective value but only individual's subjective perception of what is valuable because values become a reality only by use or consumption. In addition, the only way to obtain information for a value construct is to rely on the perspective of the value recipient and it is based on this perceived value that provides the foundation upon which the relationship exists (Woodruff, 1997). Hence, any definition of perceived value must give explanation for the inclusion of total benefits, including direct and indirect benefits derived from attributes and consequences that arise from partner activities and behaviours, less total direct and indirect costs, and be determined from the customer perspective (Danner, 1981).

This is because what makes up value appears to be highly personal and distinctive and may vary widely from one customer to another (Holbrook, 1994; Zeithaml, 1988) as we receive, organise and interpret information in an individual way (Armstrong and Kotler, 2005) based on our past experience, beliefs and attitude (Kurtz and Clow, 1998). Therefore, value is like beauty; it is relative and is in the eye of the beholder (Danner, 1981; Konrath, 2003; Regebro, 2004). This means that individuals themselves have to decide whether something is of value to them because they value things differently.

Pulling together the viewpoints of perception, value and perceived value mentioned in the sections above, for the purpose of this research and applying it into CoPs' context, the working definition of perceived value, as adapted from the marketing perspective, is

> *the worth, benefit or gain that individuals themselves perceived that they have obtained from participating in CoPs relative to their needs or circumstances at a particular time and as a result of bringing a desired change or impact (directly or indirectly) in terms of personally and professionally at various phases of their CoPs' membership.*

To elaborate this further, the values of CoPs refer to the benefits or utility members received from their participation as a member which makes up the engagement experience. By participating in CoPs' activities, individuals construct value as they engage with other members. From an individual's perspective, value can be direct or indirect. For example, when the knowledge received can be directly applied to the improvement of the individual's situation or in the execution of their job, this can be called direct value. At times, when they are unable to discern the way in which this improvement takes place, but is certain that somehow it profits from CoPs, then it is considered as subjective value or indirect value i.e. knowledge that can satisfy

individual's curiosity or sustain individual's need for a sense of belonging or appreciation which are seen as valuable.

Essentially, individuals do not react to all knowledge in the same way because individuals construct knowledge through an adaptive and interpretative process as they engage in CoPs. These value constructs are unique to individuals because their experience is situational and personal, depending on their personal values, past experience, relationships, their needs, other members and the external environment which make it a dynamic and complex process. Moreover, these perceived values are different at various phases of their participation, even though they are participating in the same CoP. Therefore, it is argued that to appropriate the value of CoPs' membership, one need to participate in CoPs, for it is through their engagement or interaction members construct value. In addition, the impact is related to their needs and what they have learned to integrate into their workplace (professionally) and their everyday life (personally), bringing about a desired change to the individual.

Generally, members will be motivated to participate if there is continuity of contact and an opportunity to deal on a regular basis. Members will find it more valuable when the relationships of members are further strengthened with a good fit by sharing a common interest (domain) with like-minded people (community) and learning how to do things better (practice). These activities are perceived to be of value if the activities create value at specific times and context that they are experiencing, relative to their needs and values. Realistically, members will also perceive their participation to be of value if they do not have to spend too much time

and energy on performing the activities and to get to it. They are prepared to invest resources, including time to develop a mutually beneficial relationship. This type of relationship exists in environments where both parties know and trust each other.

Really, individuals' perceived value depends on members and its situation and is one of the most unique cognitions a sentient being can make. This means that value is perceptual (Ford and Staples, 2006) and is more than likely conferred in accordance with certain personal bias and subject to individual cognitive performance, both actual and recalled (Cox, 2003). Hence, it is not possible to draw up detailed prescriptions on how individuals' perceptions can be analysed, bearing in mind that they do not respond to the world as it really is, but as they perceive it to be. Effectively, value is a preference according to an individual's perception of the qualities of object and it cannot be weighed, measure or numbered. Thus, in order to learn what a value is, individuals need to experience it and reflect from their experience (Kelvin, 1972) because value by nature is not a final value or a value-in-itself as it is a means to other values. In other words, it is a value-in-use or a means-value (Danner, 1981). By valuing, judging or making sense of the perceived values of their membership, it is instrumental for members of CoPs to guide their own development, to know how they are doing and to guide ongoing efforts to become more vibrant and effective. In so doing, this reinforces members' participation and provides a basis for prioritising activities. Moreover, it helps members and communities to see the link and interpret how the perceived value has impacted them, personally and professionally. Therefore, perceived value is highly complex and highly individual, and it requires substantial explication if it is to be understood (Becher and Trowler, 2001), and the following section will address this issue.

2.4.4 How to explicate value?

As mentioned above, the source of values is in experience and this means that members learn what a value is by participating in a CoP, confirming it in their context (Danner, 1981) because this is when they make sense of some phenomenon and then interact with it (Jonassen and Land, 2000). Whenever something is held to be of value, there is always to be found somewhere on the sidelines a value with respect to which this thing is prized. Rescher (1969) distinguishes the 3 following factors of evaluation:

1. The value object that is being evaluated and may be granted attributive value.
2. The locus of the value i.e. an item in respect of which the evaluation proceeds and through which values enter upon the stage.
3. The underlying values that are at issue.

Rescher further explained these three factors by citing the following example: Smith's friendship was of the greatest value for the advancement of Jones's career. Therefore, an evaluation of something that is held to be of value that includes Rescher's 3 factors will be:

1. the value object that is being evaluated (Smith's friendship).
2. the locus of the value (the advancement of one's career).
3. the underlying values that are at issue (financial security, personal development).

From this example, "Smith's friendship" is of value to Jones presumably because it has helped him to advance in his career, which leads to financial security and/or

personal development. As claimed by Rescher (1969), the distinction between a value, a value object and a locus of value is helpful in avoiding serious confusion because a person can value nearly anything but as argued by Najder (1975), only a limited number of desiderata are sufficiently explained. Therefore, supporting Najder's opinion, it is argued that the three factors stated above do not all have to exist necessary and should not be separable as claimed by Rescher. This is because when evaluating, an object can be both the value object and its locus. In other cases the locus is simply either a particular aspect or an attributive or axiological value. Therefore, in this research, the three factors will not be treated separately but are seen to be interrelated and are used as a base or structure to tease out or to illuminate individuals' perception of the value of CoPs' membership.

Additionally, the example implies that values are valued for reasons, and in the case of most values for a wide plurality of reasons. This is because, as stated earlier, every value leads on to other values and because the factors through which a value has its appeal are themselves values. They are thus, in a sense, components of the value which is under analysis, since they constitute the value of that value. Therefore, every value is complex (it is a complex process) in that to be a value at all is to be valued for something, to have values. Furthermore, by reasons for valuing it is meant not only the consciously apprehended ends, but also that larger group of factors which operates semiconsciously (Weinberg, 1992). Hence, it is difficult to understand the value of CoPs because the effects of community activities are often delayed as the results or the impact of the value appear in individual's workplace of their everyday living and not in the communities themselves (Stahl, 2003). Moreover, individuals cannot interpret everything as the value of community

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participation is often invisible or tacit (Wenger *et al.*, 2002a) and as quoted by Polanyi (1966), "we know more than we can tell." This is why it is argued that often few individuals are expert enough to truly appreciate and assess the value they receive, even after participation and it is suggested that effective communications and personal explanations are needed to help members recognise and appreciate the values they construct from CoPs' membership (Lovelock and Wirtz, 2004). This means that the grounds for valuation are obscure but grounds for valuing exist and it is necessary for individuals to introspect upon the margins of consciousness at different points to reflect on their experience and their participation as a member of a CoP (Weinberg, 1992).

Thus, in order to develop an understanding of members' perceived values and its impact, Stahl (1993) suggests that one needs to explicate individual's interpretation by providing the path from tacit to reflection (Heidegger, 1996; Jonassen and Land, 2000). This is when they are able to see themselves 'from outside', as objects in their experience. As a result, reflection is a valuable capability to tease out the perception of members' experience (Huczynski and Buchanan, 2001) and thereby the perceived value in that particular context. This is because the method is free as to focus, summoning up reminiscences as well as observing the past (Najder, 1975; Weinberg, 1992). This is indicated in the CoP literature where many researchers have evidenced that members share their war stories to learn from each other (Brown and Duguid, 1991; Orr, 1990; Wenger *et al.*, 2002a). By sharing their tacit knowledge through the interactions and informal learning processes such as storytelling, conversation, coaching and apprenticeship of the kind that CoPs provide (McDrury and Alterio, 2003) they bring tacit knowledge and their stories to life

(Benson, 2003; Yiu and Lin, 2002). Such narratives and stories depend on members' involvement, because only members can tell how the knowledge was put into action and how it has impacted them (Wenger *et al.*, 2002a). In this sense, it can be seen that in order to suss out individual's perceived value of CoPs is to ask participants if they find the CoPs useful and ask them to justify their participation (Benson, 2003) because after all stories and narratives are personal and is a way to capture what is unique (Post, 2002). As individuals reflect and make sense of their participation through their narratives and stories, it helps them to raise their awareness of their participation and to think about the social life of the idea beyond their own use of it (Wenger *et al.*, 2002a).

In summary, due to value's myriad manifestations, its complexity and its subjectiveness, the way to explicate value is to ask members themselves, reflecting on their experience. This is because when they engage in collaborative activities, they then come to recognise and interpret these values from their own perspective (Stahl, 2003). More specifically, this research asks the questions of what are the values members perceived that they have gained out of CoPs' membership, why they are valuable and in what way it has helped them in doing research. This reflects the notion of clarifying a perceived value by including Rescher's (1969) three factors as a suggestion to express in a declarative statement for the corroboration of which it is necessary, among other things, to invoke directly or indirectly the perceived value and its impact. This will help to unravel the complexity of values and help members to interpret them in the truest sense depending on the evidence mentioned and on the value constructed in the particular context.

2.5 The Value of CoPs to Members

CoPs create value in multiple and complex ways, both for their members and for the organisation (McDermott, 2001). They typically provide value on three different levels: individual, team/business unit and organisational, but individual community members are the most immediate beneficiaries of communities (McDermott, 2002). However, past research has typically centred on how CoPs can benefit organisations by integrating knowledge generated from CoPs into organisations (Ardichvili *et al.,* 2003; McDermott, 2000a; Newell *et al.,* 2002; Wenger 1999, 2003), but little research has been conducted on the benefits of CoPs' membership from an individual's point of view, and this is the focus and distinctiveness of this particular research. Based on the synthesis of previous research, this section will summarise some evidence and testimonies of members on the benefits they perceived that they have gained from CoPs' membership.

2.5.1 Develop new knowledge

The voluntary and informal nature of communities is conducive to learning and the development of new knowledge (McMaster, 2000). Sharing and building knowledge in this context is a fluid mix of framed experience, values, contextual information, expert insight and grounded intuition (Davenport and Prusak, 2000, Mitchell and Young, no date). Moreover, with CoPs crossing boundaries, they foster interaction between new/junior members and senior/experienced members thereby building collegial relationships instead of mentor-protégé relationships (Gasiorek-Nelson, 2003). This contributes to a friendlier environment for learning because individuals can gradually increase their levels of participation, they learn and exchange knowledge (Lave and Wenger, 1991) that can help individuals do their jobs (Allee,

2000) and upgrade their knowledge in daily use (Por, 2003). Also members can gain access to the collective wisdom of their multi-disciplinary or multi-institutional members (Liedtka, Haskins, Rosenblum, and Weber, 1997). This is of value to individuals because no one had all the answer and knowledge in any one field is too complex for one individual to master (Wenger *et al.*, 2002a). Therefore, in a CoP, it is like a collection of experts, each of whom is trying to contribute a piece to the puzzle (Liedtka *et al.*, 1997), sharing and developing knowledge to their field.

2.5.2 Help to expand skills and expertise

Apart from developing new knowledge, participating in a CoP can nurture continuous improvement in individual's mastery (McMaster, 2000) as the spirit of inquiry CoPs generate help to develop skills and competencies (Allee, 2000) by including the perspectives of others thereby devising better solutions and making better decisions (Wenger *et al.*, 2002a). In a CoP, members receive help solving daily work problems, gain access to tools and templates, learn best practices and discuss cutting edge ideas (McDermott, 2001; Por, 2003). In the course of socialising, members develop a collective pool of practical knowledge that any one of them can draw upon (Wenger & Snyder, 2000) and by exchanging their interpretations, members can share efficient techniques of working through different and complex situations (Bhatt, 2001). This access to knowledge and expertise has resulted in improved individual's skills and know-how (Fontaine and Millen, 2002).

2.5.3 Creativity

Moreover, since CoPs are self-organising, individuals are allowed to act autonomously and this widens the possibility that individuals will motivate

themselves to form and absorb new knowledge (Nonaka, 1994). In such environment, creativity is promoted (Orlikowski, 2002) and it fosters unexpected ideas and innovations (Por, 2003) as members are free to think beyond their existing knowledge frame. Also, it allows a diversity of ideas and experiences to be expressed, tested and then shared. Through the sharing of their experiences and knowledge in free-flowing, creative ways, it gives members an opportunity to reconsider their fundamental thinking and perspectives (Nonaka, 1994) and this fosters new approaches to problems (Wenger and Snyder, 2000; Orlikowski, 2002). This is also because members come from different backgrounds and can have very different ways of relating to one and another. The freedom and their willingness to confront or contradict each other's ideas and to discuss their problems can result to different interpretations leading to new ideas. Adding on to that, since there is continuity in CoPs, members build on each other's idea and develop relationships built on trust which increases their ability to innovate (Nonaka, 1994).

2.5.4 CoPs as a sounding board

Given the trust, members can feel safe to share their half-baked ideas or even ask questions that reveal their ignorance. This means that members are able to interact directly and use each other as sounding boards for new ideas and help each other to learn, using one another as critical resources. As they interact and articulate their ideas or problems, they are likely to understand and obtain others' views, giving them a different perspective (Bhatt, 2001). In this sense, a CoP provides a place where individual's perspectives are articulated and members can collaborate to create a new concept or develop an existing or a half-baked idea (Nonaka, 1994). This provides a non-threatening forum for members to explore and test ideas to validate

courses of action (Rumizen, 2002). It also provides challenges and opportunities to contribute (Allee, 2000) and members often feel more conscious of, and confident in, their own personal knowledge. Therefore, this interaction process is helpful in developing a holistic view of the range of complex problems and situations, thereby facilitating the cross fertilisation of knowledge and, as a consequence, developing knowledge and verifying best practices (Bhatt, 2001).

2.5.5 "Hands-on" experience

The knowledge shared in CoPs are practical and of personal knowledge. They are "hands-on" experience or individual's original experience, which is the fundamental source of tacit knowledge (Nonaka, 1994). CoPs offer an opportunity for individuals to engage directly with one another and find out what problems they were facing and how they were approaching them. This mutual engagement in the details of the practice makes participation directly relevant to the work of members (Wenger, 2004). Their shared narratives and war stories are a unique perspective original to an individual and cannot be found or codified in any of the document or manuals (Brown and Duguid, 1991; Orr, 1990; Wenger et al., 2002a). These original perspectives are based on individual belief and value systems and will be a source of varied interpretations of shared experience with others in the next stage of conceptualisation. Therefore, in a CoP, members experience knowledge, they talk to one another, solve problems together, discuss specific cases so that they learn both the tacit and the explicit aspects of knowledge (Wolf, 2003) and this serves as a platform where members can learn together and focus on problems that were directly related to their work.

2.5.6 More fun and meaningful participation

This makes participation meaningful and fun because members have the opportunities to solve problems, develop new ideas and build relationships with peers who share a common passion as usually a CoP is made up of like-minded people (Wenger and Snyder, 2000). They understand the domain and are aware of the developments and the cutting edge in their field. Also, members can get help with immediate problems and they spend less time hunting for information or solutions. In the short term, it improves their work in terms of productivity (Fontaine and Millen, 2002; Wenger *et al.*, 2002a) and making their work easier or more effective, saving them time and energy. In the long term, it helped build their shared practices, thus developing capabilities critical to the continuing professional development (Wenger and Snyder, 2000) and personal job satisfaction (Fontaine and Millen, 2002).

2.5.7 Networking and keeping abreast of a field

Furthermore, the interaction allows members to get to know each other through the building and maintenance of strong social networks that generate trust, respect and commitment. This builds CoPs' social capital, which provides the foundation for ongoing interaction and sharing of information. Effectively, members can tap into each other's knowledge and resources and exchange through these networks by pooling their resources thereby creating synergistic effect. Also, they can tap into other members' networks or weak ties that cross institutional boundaries to connect to different social setting and with dissimilar persons (Granovetter, 1982). Other members can point them to the direction where help is available as the community is a source of information (Fontaine and Millen, 2002). As such, this produces an

environment in which an individual could use the larger network to reach outcomes which are not possible when acting alone. This is because having access to experts also help to expand horizons, gain knowledge and seek help in addressing work challenges (Rumizen, 2002). Members of a CoP know whom to ask for help with a problem and they also know how to ask questions so that peers can quickly comprehend and focus on the heart of the problem (Wenger and Snyder, 2000). Hence, such bridging ties have provided good access to information and resources which enable members to capitalise on the multi-organisation and multi-communities value web (Liedtka *et al.*, 1997). Therefore, CoPs help to weave broader value webs created by relationships and exchanges both within and beyond the boundaries of the CoP.

This also means that these networks help members to stay current and to keep abreast of new developments in their field (Allee, 2000). This confluence of value creation implies that members are constantly discussing upcoming technologies or issues and prepare themselves to respond to these developments (Wenger *et al.*, 2002a). This enables members to adapt to the emerging threats and opportunities of their field and also give them the capability to inform or enact new initiatives in their field.

2.5.8 Help and support from members

In developing these networks or relationships, they makes it easier to ask each other for help as individuals know who is likely to have an answer and they can feel confident that their request is welcome (Wenger *et al.*, 2002a). They know that other members are ready to discuss their new or half-baked ideas and they are also certain that other members can see it as a promising idea or where the problem lies. It gives

members the time and encouragement to reflect, share ideas, listen to what others are saying and think through the implications of those ideas (McDermott, 1999b). With the help and support from members they know that they have a community to back them up where members are ready to get to work, to think, to invent and to find solutions together. Moreover, they can coordinate efforts and find synergies across organisational boundaries and seek peer-to-peer help in solving their problems (Wenger et al., 2002a; Por, 2003).

In addition, new members learn in a supportive environment and can benefit from the coaching of more experienced members (Wenger et al., 2002a). They can ask for advice or share their opinions in an encouraging environment and without repercussion. This is because members are committed to share and develop the knowledge and practice in their fields so that it can be applied to produce results that forward the interests of the whole. These combinations of practice and commitment which are at the heart of CoPs allow members to feel that they are members of a community, together and supporting each other in their endeavours. This allows them to feel secure enough and comfortable enough to challenge and be challenged in ways that move things forward rapidly and be counted on to produce results (McMaster, 2000).

2.5.9 Sense of belonging

Therefore, it can be seen that CoPs are forums where members meet regularly to engage in sharing and learning. It gives them a sense of belonging and provides a professional home for its members where they can develop their knowledge and skills in a stable, safe and trusted context (Wenger et al., 2002a). Members know

that when a problem or issue arise, they can bring it to the community to voice out and get ideas. In this sense, it gives members a strong sense of sharing in responsibility and concern for others, in particular a strong sense of belonging (Reynolds, 2000).

2.5.10 Sense of identity

Apart from giving a sense of belonging, CoPs also provide members with a sense of who they are. By contributing to a community, members gain enough visibility to become known to other members. Their contributions are typically driven, not only by the value of the community, but by their passion for the topic, their sense of obligation to their peers as well as the recognition and gratitude they receive as for them, it is personally more meaningful than rewards (McDermott, 2001). Therefore, contributing has intrinsic value because for some individuals, the simple satisfaction of helping others and making their mark on the field is a significant benefit (Wenger *et al.*, 2002a). This fosters a greater sense of professional commitment and enhances members' professional reputation (Rumizen, 2002).

Additionally, members engage in sharing and learning based on common interest. This provides members with a sense of identity, both in the individual sense and in a contextual sense in terms of how individuals relates to the community as a whole (Wenger, 1999). Since the interactions in CoPs have some continuity, interacting regularly allows members to develop a shared understanding of their domain and an approach to their practice (Brown and Duguid, 2001a). As members work together, they not only learn from doing, they develop a shared sense of how to get a work done. They develop a common way of thinking and talking about their work and

over a period of time, they share a sort of mutual identity, a single understanding of who they are and their relationship to the larger environment. Therefore, members gain a reputation, achieve a status and generate their own personal sphere of influence. This means that a CoP is a source of information and of social integration. It's a gathering of fellow practitioners in a professional subject and a place to solve practical doubts and gain recognition as an expert, frequently the best way for career improvement (Castro, 2003).

In summary, even though the values stated above are discussed separately, it is inevitable that some will overlap as one value leads to another. Thus, the sub-sections above are by no means seen as boundaries where values can be simply slot into. In fact, they serve as a framework to guide the analysis process of this research. In essence, members can construct a great deal of value by what they personally bring to the relationship and they only contribute if the value of participation is worth their time and energy (McDermott, 2001). Generally, according to Malone and Lepper, 1987), members' interest and perceived value are enhanced when

- activities are varied and include novel elements;

- the problem is authentic and they find it valuable, interesting or useful enough to work on as well as rich enough to promote both depth and breadth of knowledge in their creation;

- the problem is challenging;

- there is closure or tangible output;

- there is choice about what and/or how work is done to enhance motivation to work on them; and

- there are opportunities to work with others, to discuss ideas, to communicate, to consider alternatives and to monitor their own understanding.

Therefore, participating in CoPs allows members to develop professionally, remain at the forefront of their discipline and gain confidence in their own expertise (Fontaine and Millen, 2002), thereby helping members to get the best of both worlds – enhanced professional reputation as well as access to knowledge resources. It should, however, be emphasised that a CoP is a not a silver bullet (Wenger *et al.*, 2002a). Even though this research focuses on its values and benefits, the researcher acknowledges that CoPs can have negative aspects and these will be highlighted in the following section.

2.6   The Downside of CoPs

There has been research on the downsides of CoPs e.g. Contu and Willmott (2003), Fox (2000), Pemberton and Stalker (2006), Roberts (2006), and Wenger *et al.* (2002a). Wenger *et al.* (2002a) mentioned that the assets that make a CoP an ideal structure i.e. a shared perspective on a domain, a communal identity, long-standing relationships, an established practice, can also be a weakness. In particular, some of the limitations of CoPs highlighted by these authors are:

- Members take pride in, or become over enthusiastic about, their domain once it is widely recognised and well entrenched that lead to arrogance and ignorance of others' new points and perspective. They can believe that they are experts of the domain and what they know is all there is to know. Also, they may claim exclusive ownership to their knowledge, thinking that their domain is more important than others and hoard it from others or from the organisation. This

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creates CoPs that are imperialistic and not open to alternative views, as they believe that their perspective is the right one, thereby limiting their knowledge frame to go beyond their domain.

- The tight bonds between members may not always result in positive aspects as they can become exclusive and present a barrier for entry, becoming counterproductive by forming cliques, either intentionally or unintentionally. These CoPs are unlikely to expand their membership or it is difficult for new members to enter, and this may lead the CoP to stagnate. This is because their desire for a sociable atmosphere can prevent members from critiquing each other or from seeking to deepen their understanding of their domain being locked in a blind, defensive solidarity as members strive to protect each other from challenges. This can hamper individual growth or creativity as the power of a group norm of equality and can become difficult for any one member to engage in any 'deviant' ideas.

- Members may develop a shared practice that is a liability as well as a resource. This is because the terminology or specialised language and experience they share can create barriers to outsiders and also create boundaries for practitioners as the strong sense of competence can lead to dogmatism and members may refuse to accommodate any variation.

- Even though CoPs are self-managed and self-directed, they usually have a leader or coordinator internally in order to be effective since otherwise will lead to fragmentation and lost in momentum. However, with an internal leader, there is the issue of distribution of power where leaders manage or take control of the group instead of facilitating discussion, thereby imposing their dominant view. Also, CoPs may not always be suitable in organisations especially when their

interests are not aligned with those of the organisation and this could create inertia in achieving individual and/or organisational goals as they may operate in their own individualistic world, pursuing their own interests and practices.

To some degree, these downsides are inevitable and it is suggested that acknowledging them is useful for understanding CoPs and to ensure their continuing value (Pemberton and Stalker, 2006; Wenger *et al.*, 2002a). This is because by recognising their negative aspects, one can benefit from the positive side of CoPs by learning and managing it, as well as avoiding the potential pitfalls wherever possible. Therefore, it is argued that by focussing on the values it can allow CoPs to flourish by paying attention to value creating activities and fine-tune the process as it evolves so that the value to participate in a CoP may outweigh their downside.

In addition, because CoPs are made up of human beings and exist in organisations, they are inevitably influenced by the dynamics of its internal and external environment. This makes CoPs contextual, depending on members' personalities, their motivation, intellectual capacity, experience and area of expertise and the perceived values depend on the context of the CoP which is in turn influenced by the institutional context, as well as the wider context in which it operates. Previous research has been conducted in various sector and institutions such as Xerox, Buckman Laboratories, HP, Daimler Chrysler, McKinsey, Shell, World Bank and etc, just to name a few. However, so far, to date, limited research has been conducted in the HE sector for the purpose of doing research. Even though there is some research in the HE sector with regard to the CoP concept, it was conducted for the purpose of pedagogy and instruction. Hence, it is the interest of this study to see

the effects of CoPs within the research environment of the HE sector, particularly focussing on individual's participation of research-based CoPs and in what way this membership impacts and creates value in improving and developing research.

2.7   RESEARCH ENVIRONMENT IN HE

As mentioned in Section 1.3, research is one of the fundamental activities that academics engage in (Sargent and Waters, 2004) because the work in HE is knowledge-based and is very much supported by research. Fundamentally, HE institutions do not do research but individuals (academics) do. Yet, the complex institutional conditions or context which is influenced by a larger dynamic environment or the regulations in the HE environment affect individuals' research productivity (Fox, 1992; Rousseau and Fried, 2001; Trowler and Knight, 2000) and the environment in which universities conduct research has changed radically within the past two decades (Kirkland *et al.*, 2006).

The trends and developments that have influenced the shifting research landscape are numerous. Firstly, there has been a changing pattern or level of funding (Brew, 2000; Heffner, 1981; Maslen, 2002; Smith, 1958) with a greater push towards collaborative efforts of academics in the implication of funding (Becher and Trowler, 2001; Sargent and Waters, 2004) where it is usually conditional on collaborative research across different countries, aiming to further integrate research efforts and to assist the development of research cultures (Becher and Trowler, 2001). Therefore, there have been numerous initiatives launched with the aim of developing collaboration amongst individual researchers by bringing them together, for instance, in interdisciplinary groups or even fostering research collaboration across sectors, in

particular between universities and industrial partners (Katz and Martin, 1997). Furthermore, most governments are keen to increase the level of international collaboration. Thus, research funding is now more geared towards and concerned with collaboration between individuals, groups, institutions, sectors or nations and the success in attracting external research funds depend enormously on the ability to establish multi-disciplinary/multi-professional and multi-institutional research groups (Cronin, 1995).

This implies that the issues facing universities are comparable internationally or globally (Kirkland et al., 2006) and also means that research is no more within one university – it needs to cross disciplines, institutional or even national boundaries (Marginson, 2006; Smeby and Trondal, 2005). As it becomes more international, it gives rise to challenges in the skills or expertise needed to do research (Altbach and Lewis, 1996; Katz and Martin, 1997; Kirkland et al., 2006; Rousseau and Fried 2001), such as learning to work and socialise with each other, as well as learning to work in and with different cultures. Moreover, with increased specialisation and advancement in disciplines, this means that research requires greater knowledge in order to make significant advances, a demand which often can only be met by bringing together an individual's knowledge with that of others (Bush and Hattery, 1956; Jewkes, Dawers and Stillerman, 1959; Marginson, 2006; Smeby and Trondal, 2005; Smith, 1958). Hence, with the increased complexities in collaboration and in research (Henkel, 1997; Knorr Cetina, 1999), knowledge in one field is too difficult to master and this leads to an increasing desire to obtain cross-fertilisation across discipline (Beaver and Rosen, 1978, 1979a, 1979b; Becher and Trowler, 2001).

Due to the increasing importance of research, both to the financial health of and their contribution to wider societal and economic objectives (Kirkland *et al.*, 2006), governments have adopted performance-based research funding schemes that financially reward research productivity of those universities and departments which obtain the highest ratings in the UK's Research Assessment Exercise (RAE) (Boaden and Cilliers, 2001). The RAE is a formal and externally imposed quality assessment and audit regime in relation to research (Rowley, 1996). It is designed to assess the quality of research performed in the UK HE sector with research being reviewed by peers (Paisey and Paisey, 2005). The results provide an overview of research quality in the UK and determine the allocation of research funds from UK University funding councils to individual institutions (Marston and Ayub, 2000) to support research. University departments are rated according to the quality of research submitted for the assessment. The higher the rating scores the more funding is received, with funding only available to the higher ratings. Some of the criteria used in developing a rating include a count of the number of articles written by a department's staff and these articles need to be in particular journals that are prestigious; the departments' areas of current research strength based on the reputation of the research of the academics in these areas which is judged by their individual achievements in producing publications; winning competitive grants; engaging in significant collaborations; winning significant competitive national and international prizes for their publication; invitation to participate in national and international academic public conferences; membership of the (national) learned academies; details of research students; research plans; and etc. (Kirkland *et al.*, 2006; Marston and Ayub, 2000).

Therefore, the core funding for research which comes as part of the universities' annual grant is allocated as a result of competitive assessment (Kirkland *et al.*, 2006) and a high RAE ranking can lead to greater likelihood of success in securing research funding and increasing numbers of students and can help academic in their career prospects (Brinn, Jones and Pendlebury, 2001). This periodic RAE has come to dominate research activity in UK universities as it provides a greater focus for research and for stimulating an increase in the number and quality of publication (Harley, 2002). Hence, it has serious effects on university and departmental funding and also on staff who may be subjected to a 'publish or perish' pressure. Measurable publication output is one of the most important criteria for a university department that wishes to retain any semblance of scholarship and that wishes to avoid erosion of its resource base (Marston and Ayub, 2000). One of the consequences of these developments has been the increasing need for universities to centrally 'manage' and support areas of research that have been previously regarded as the responsibility of individual academics (Kirkland *et al.*, 2006). However, there are no specific guidelines and very little is known about the mechanisms which can facilitate research (Sargent and Waters, 2004). Therefore, the efforts to develop a coping strategy are far from complete because this is seen as a complex issue and processes are still in a state of evolution.

2.7.1 Universities' response to the research environment

The intense competition for research funding has changed the behaviour of universities (Marston and Ayub, 2000) and in response to these changes and pressures, universities impose significant pressures on individual members to respond to pressures from within their institution. The pressures impact different

departments, schools and subject disciplines differently but they are experienced by almost everyone in HE (Rowley, 1996). This renewed focus in research means that faculties are encouraged to conduct research and to develop as researchers (Boaden and Cilliers, 2001; Creswell, 1986a) and this creates a shift in culture where academic staff who have always been valued for their contribution to teaching and course development (Rowley, 1996) are evaluated as researcher (Caplow and McGee, 2001). This is reflected in universities' reward or appraisal systems in placing the importance of research productivity (research, publication and activities in professional societies) as a criterion for academic personnel decisions (Moore, 1992; Dill 1986; Schuster and Bowen, 1985). However, the increased emphasis on research performance in academic reward and evaluation systems has not had a powerful influence on individual's research productivity because the factors influencing a faculty's research behaviour are intrinsic i.e. their core values, their socialisation with colleagues in the profession and the values and beliefs of colleagues (Dill, 1986; Dundar and Lewis, 1998; Tapper and Salter, 2003). Moreover, individuals are academic professionals who demand autonomy in their performance (Clark 1963; Harley, 2002) and they embrace and enhance different kinds of authority i.e. the authority of knowledge (Wagner and Kellams, 1992). Therefore, faculties cannot be 'forced' to do research and they need to do it out of motivation which has to come from inside of an individual (individual's initiative) and cannot be established by external factors alone (Finke and Will, 2003).

This also means that apart from teaching, research activities are integrated as part of academic's role (Rowley, 1996), and some also take on a managerial role. Time is also a crucial factor in carrying out research and can limit faculty to learning

opportunities (Caplow and McGee, 2001; Dill, 1986; Rowley, 1996; Tippins, 2003).

Academics often work in a tight resource climate where there are a lack of resources,

limited access to leave and time, additional administration responsibilities, heavy

teaching loads (Rowley, 1996) and constraints in research funding (Brew, 2000;

Maslen, 2002).

Universities impose significant pressures on academics to teach more students, at the

same time as making a contribution to research, publishing and consultancy areas

(Rowley, 1996) and this raises the issue for universities in identification of priorities

and allocation of resources depending on whether they are new or old universities.

New universities have been traditionally more teaching and less research-oriented

than their more established counterparts i.e. the traditional or old universities

(Thomas and Harris, 2000). Hence, between them, there are differences in terms of

priority for research, resource availability and research culture. Academics in new

universities often have managerial roles, and do research in addition to their teaching

load. In other words, they are expected to make a contribution to research and

publishing, but still carry relatively heavy teaching loads and seldom have access to

sabbatical leave and other opportunities that allow them to focus on research.

Conversely, old universities, tend to emphasise research as part of their core activity

more but they also have different pressures with the need to maintain, and possibly

increase, research output to much more identifiable targets than have been evident in

the past. Therefore, there is a difference in cultural emphasis of research in new

universities as opposed to the traditional universities. These pressures have different

impacts, but ultimately are subject to similar pressures such as a target-driven

research climate and a renewed emphasis on research and publishing, triggered by

the need to compete for research funding and continuous professional development that underpins the knowledge work of universities (Rowley, 1996).

Moreover, faculties carry out research in a large variety of academic settings as universities usually prefer academics to form research groups according to departments, schools, divisions, disciplines or research centres. Universities are distinct from most other kinds of organisations as they have one striking feature about their structure that is their high degree of specialisation (Mattheou and Saiti, 2005). This type of organisational structure may promote silo behaviour and research narrowness or overspecialisation (Sample, 1972; Waddock and Walsh, 1999) because each is focussed on maximising their own accomplishments and the lack of contact, relationships and common perspectives may produce sub-optimised research performance (O'Dell and Grayson, 1998). In addition, in large organisations such as universities, it may be difficult to find people with similar research interests and because so many faculty members are not in regular face-to-face contact, opportunities for serendipitous knowledge exchanges (e.g. 'hall talk') that are important sources to research ideas are eliminated or severely reduced. Thus, one of the barriers that inhibit research can be due to the lack of relationship building between peers within a university (Tippins, 2003) and, in this sense, research is seen as a social process, as is research productivity (Fox, 1992).

2.7.2 Individuals' response to the research environment

Such institutional pressures and the intense competition for research funding have also changed the behaviour of academics as they are subjected to intensified surveillance and control and erosion of academic freedom, and they are now

commodified as productive achievers of research rankings (Marston and Ayub, 2000; Puxty, Anthony, Sikka and Willmott, 1994; Tapper and Salter, 2003). This is largely due to the RAE which has focussed attention on research and created a strong pressure to publish, but often research is dictated by the fads and fashions of journal rankings. One of the difficulties with such exercises is that they are inclined to devalue certain types of research and output as academics may ignore other forms of research publications to concentrate on publishing in 'high-status', 'international', 'American', 'theoretical' refereed journals which are favoured by assessment panels and have scored highly in the RAE. It forces academics to concentrate on publishable research in the 'right' journals rather than on research that they want to do (Harley, 2002; Marston and Ayub, 2000).

Moreover, although academics may provide some valuable insights or groundwork, it is often difficult to integrate such activities with major funded research projects as some universities design larger research groups or institutes which are used for both external and internal purposes. Externally, they are used both as a lever for persuading funding bodies that the university has genuine expertise and commitment in the areas concerned and, in some cases, as a direct means of attracting external grants of government funding. Internally, it is intended that academics would eventually be allocated to such a centre, to provide umbrellas under which research activity can be coordinated and to generate enduring and distinctive strengths of the university as a whole (Kirkland *et al.*, 2006). The output from such activities might, on occasion, but does not usually, lead to fundamental contributions to the advancement of knowledge (Rowley, 1996)

Overall, from the descriptions above, carrying out research in the HE sector can be regarded as a diverse, regulated and competitive environment. Academics carry out research in institutions that exist not in a stable state but in one of continuing change (Kirkland *et al.,* 2006). To adapt, they have taken some steps to cope and survive the changes and pressure in their organisations and the influencing external environment. Furthermore, researchers have tried to work closely with others in order to benefit from each other's skills, experience or tacit knowledge (Beaver and Rosen, 1978, 1979a, 1979b). This enables them to learn various skills and knowledge needed for doing research and to apply for or attract funding. In this way, collaboration and pooling of knowledge and resources for synergistic reasons as well as motivational ones, are often apparent (Sargent and Waters, 2004). In turn, this can increase the opportunities to gain funding and to be seen as research active. This, arguably, contributes to individuals' career enhancement and continuous professional development in the quest to stay at the forefront of their field.

Hence, any mechanism to enhance individuals' research or career is welcome and this research argues that the notion of CoPs fits in well and can be a useful mechanism to improve research especially in a university environment where the transfer and creation of knowledge is dominant. Moreover, focussing on individual members is relevant because CoPs are effective in involving practitioners actively in managing their knowledge, what more if they are academics, also known as knowledge workers. They are in the best position to manage their knowledge because it is their knowledge and they know how it affects their ability to do their work (Wenger, 2004). More specifically, this research focuses on individuals'

experience of participating in research-based CoPs while trying to gain insights of the values and impacts of their membership towards research in the HE environment.

2.7.3 The notion of research-based CoPs in HE

CoPs can exist in a variety of forms in the HE environment, for example, between academics; academics and research students; or academics and practitioners. Since CoPs are fluid and flexible, able to cross boundaries, these informal networks can facilitate collaboration, integrating researchers from different groups who do not see each other everyday or even people from different institutions or cities (McDermott, 1999b). Therefore, its fuzzy boundary can allow research to be conducted within a school or a university, or between universities or between different sectors. In this sense, the notion of a CoP will be an alternative path for sharing knowledge outside the institution's hierarchy. Moreover, by bringing together people who are like-minded or who are with similar research interest facilitate the coming together of knowledge, skills and resources needed for synergistic effects to cope with the complexity of research. This also helps to support the formal and informal mechanisms that are needed for knowledge sharing to occur within the organisation (Szulanski, 1996) and create a simple awareness of where or from whom to seek certain type of knowledge (Tippins, 2003). Also, with the ability to establish multi-disciplinary/multi-professional and multi-institutional research teams, it increases the opportunity to attract research funding (Cronin, 1995).

This type of communication and the access to relevant information channels inside and outside the institution is critical (Dill, 1986) to stimulate research (Blau, 1973, Pelz and Andrews, 1976; Reskin, 1977) and to a vibrant research culture because

through discussion, observation and direct contact, individuals are socialised to the critical norms and values of their professional community as well as the exchange or acquisition of knowledge (Dill, 1986). Additionally, this helps members to avoid overspecialisation and to overcome their limitations by getting alternative perspectives and learning from each other as the knowledge in one field is too complex to master (Fox, 1992). This can offer continuous development which is particularly important for faculty in order to stay at the forefront of their professional fields and they must constantly be aware of any developments within their particular disciplines (Rowley, 1996) because they are knowledge workers who need to keep their store of knowledge current (Reay, 2000).

In a CoP, membership is voluntary or through invitation and it is totally up to individual's motivation or initiative to join in. This is because a research-based community will embrace people who are at different stages of their development as researchers. It may include research students, research assistant, research fellows, lecturers, senior lecturers, readers, professors and probably, practitioners, secretarial, administrative and technical support staff. Therefore, the distinctiveness of research-based CoPs compared to previous attempts to introduce the concept of community into research practice efforts is the development of self through participation in the community and the importance of legitimate participation as part of a community. It emphasises members' relationships and participation and creates opportunities for reflection and interaction on their situated experiences with others who have varying levels of expertise (Barab and Duffy, 2000), and these are the central features of CoPs for achieving knowledge productivity and increase research capability in the HE context. Therefore, their relationships are described as "working with, not

working on" (Lieberman, 1986) and this implies that there is no hierarchy among researchers and that decision making is democratic and collaborative (Hord, 1986; Oakes, Hare, and Sirotnik, 1986). Basically, these research-based communities create an opportunity for members to meet and build relationships that facilitate the sharing of their practice and the research that they are developing and to be effective in their field or their workplace. This also allows them to take time out from their busy work schedule to do research activities (Fox, 1992).

Moreover, CoPs are informal and self-organising, thereby giving members freedom and autonomy to set their own agenda in their research activities as they are permissive rather than restrictive (Rowley, 1999). Each will have their own personal development agendas and career aspirations but they have the autonomy to follow particular lines of enquiry and esoteric passions (Meyer and Evans, 2005). Every individual will have a unique contribution to make (Rowley, 1999) depending on what the member considers valuable to share as well as their own experience, goals, problems and perception (McDermott, 1999b). Therefore, members determine the content and form of knowledge sharing. Members can tell stories of what they have done in their careers and then they connect that story to events and issues that exist inside HE as well as sharing and testing out their ideas (Wolf, 2003). In doing so, members tend to galvanise scholarship and practice by supporting reflection and critical thinking among themselves (Buysse *et al.*, 2003), thereby explicating tacit knowledge as their reflection will not be implicit and not idiosyncratic as they open it up for scrutiny and exchange (Egan, 1997; Tillema, 2005).

Additionally, these informal conversations may then lead to increasing commitment to co-operate and collaborate in research projects (De Solla Price and Beaver, 1966; Katz and Martin, 1997). These collaborative processes of inquiry describe the social intercourse among academics (Whiffen, 2001) that are pertinent to provide researchers with an edge both in terms of research productivity and career development as well as promoting intellectual stimulation, cross-fertilisation and a multiplicity of perspectives (Cronin, 1995; Leonard-Barton, 1995). In this sense, research productivity is influenced by the orientations and activities of an individual's colleagues as well as themselves. More specifically, it is not a matter of collegiality influencing research productivity, but rather of research-based collegiality i.e. the company of individuals who inhabit a shared normative world (Salaman 1974) because collegial exchange on research problems and discoveries stimulates involvement by testing ideas, activating interests and reinforcing the work, and individuals must have an opportunity to meet up in such research-based communities to be able to share in discussions about research (Blau, 1973). In essence, most professionals learn about new tools and developments in their field not by reading journals, but by consulting their friends or colleagues (McDermott, 1999b) or as suggested by Gersick, Bartunek and Dutton (2000), to join a profession is to plunge into a community of people.

In this sense, the CoP concept appears to fit well into the HE context and as a term, it can have several meanings as it occurs in the educational parlance. In particular, this research is looking at research-based communities where members come together for the purpose of doing research. Therefore, a further refined definition of a research-based CoP for the context of this research is

a group or an informal network of academics/researchers engaged informally and contextually in an educational endeavour or for the purpose of doing research in which they share common interest and about which they have developed common approach to their field

In summary, this research proposes that the notion of CoPs can offer an alternative path to universities as well as individuals to response to the diverse research environment in HE. This is because they have been proven to be effective mechanisms for managing environment that are challenging and complex (Ng and Pemberton, 2006) and they provide an egalitarian means through which members of all ranks can speak with each other, thus decentralising position power while centralising knowledge flow and optimising focus in research. It is a forum to facilitate innovative and cross-functional dialogues across and within the departments or the universities (Dorsett, Fontaine and O'Driscoll, 2002) and its complex structures have obvious relevance to KM which is pertinent to knowledge-intensive institutions such as universities (Prusak, 2001).

2.8 CHAPTER SUMMARY

Overall, this chapter has incorporated literature from various disciplines, drawing from sociology, psychology, anthropology and organisational behaviour. More specifically, it has brought together literature on the CoP concept, focussing on situated learning and reflective practice as well as the progressive involvement of individuals into the community through LPP. Also, it has included literature on the different context and meaning of value as well as its subjectiveness depending on the perception of individuals. Then, it looked into the challenges and complexity of the research environment in the HE sector, focussing on how universities and individuals responded to this environment and finish off by proposing the notion of CoPs in the

research environment of HE. Figure 2.2 summarises the theoretical framework of this research.

CoP Concept	Perceived Value	Research in HE
• Situated Learning • Reflective Practice • Legitimate Peripheral Participation • Values of CoP membership	• The context of value • The meaning of value • What is perception? • What is perceived value? • How to surface value?	• Research environment in HE • Universities' response to the research environment • Individuals' response to the research environment • The notion of research-based CoP in HE

Figure 2.2: Theoretical Framework

The purpose of this research is not to propose a grandiose synthesis of these intellectual traditions or a resolution of the debates they reflect. Instead, the purpose of this research is to gain insights of individuals' perceived values of CoPs' membership in the HE context. Pulling this literature together has provided further understanding of the CoP concept and the nature of value where each of these traditions have something crucial to contribute to the knowledge of what this research is trying to explore. This shows that the value constructs of CoPs' membership are explained by a bricolage of various theories, which before, have not been put together in such a nature.

From the discussion in this chapter, it suggests that the world out there is not a good starting point for developing an understanding of human behaviour. As argued, individuals each have a unique version of what is out there and of their own place in it. In other words, they each live in their own perceptual world that is selective and partial, and which concentrates on features of particular interest and importance to them. Through the process of learning, motivation and personal development, individuals each have different expectations and different degrees of readiness to respond to objects, people and events in different ways. The meaning that they attach to objects, people and events are not intrinsic to these things but are learned through social experience and are coloured by their current needs and objectives, which shape their action (Huczynski and Buchanan, 2001).

Therefore, the focus of this particular research is in individuals who are participating in these research-based CoPs in the HE sector as there has been lack of research conducted in this sector and there have been much literature discussing different ways to map the value generated by a CoP, especially aligned to organisational benefits but little is focused on individuals. Hence the aim of this research is to fill this gap. More specifically, it focuses on how the membership of research-based CoPs has benefited researchers; in what way has it has helped or impact them in terms doing research and why do they perceive it to be valuable. The following chapter will consider the philosophy and the methodology this research will adopt to achieve its purpose.

CHAPTER 3

RESEARCH PHILOSOPHY AND METHODOLOGY

3.1 INTRODUCTION

Crotty (1998) pointed out that in order to ensure the soundness of the research and make its outcomes convincing, one needs to set forth the research process in terms of four elements: epistemology, theoretical perspective, methodology and methods. Thus, the researcher has discussed the approaches taken in this research in terms of Crotty's four stage framework. In effect, this chapter considers accordingly the philosophical positioning (epistemology and theoretical perspective) of this study in order to focus with a sense of stability and direction as the researcher moves towards understanding and expounding this research. The philosophical views discussed in this chapter will help to justify the methodologies and methods employed as it constitutes an analysis of this research and explicate theoretical assumptions that underpin this research. Then, it is followed by methodological considerations of this study i.e. how the researcher goes about finding out whatever she believes can be known. It will first discuss this research's methodology, then explaining its strategy and the choice of methods for collecting data. The key issues discussed revolved around the research question and in view of the fact that there is no one best way or most suitable way to do research, the sections below were built with a sense of awareness of what is explored and to establish an appropriate method to achieve the aim within the context of this study.

3.2   EPISTEMOLOGICAL CONSIDERATIONS

An epistemology embodies an understanding of what is entailed in knowing (how we know what we know) (Crotty, 1998). It concerns the question of what is or should be regarded as acceptable knowledge in a discipline (Bryman, 2004) and deals with the nature of knowledge, its possibility, scope and general basis (Hamlyn, 1995), providing the research with a philosophical grounding for deciding what kinds of knowledge can be achieved and how findings can be both adequate and legitimate (Maynard, 1994). This is because epistemology is influenced by the different assumptions regarding ontology, that is, how people view their world and understand what they see as reality (Morgan and Smircich, 1980). In other words, each individual views the world differently according to his/her own paradigm and the different world views they reflect imply different grounds for knowledge about the social world.

Therefore, epistemology bears mightily on the way researchers go about the research process and it is essential to justify the philosophical assumptions underpinning the research inquiry that will inform the theoretical perspective and the methodology considered. This is because as warned by Easterby-Smith *et al.*, (2002), failure to think through philosophical issues can seriously affect the quality of research since it can help to clarify the research design. Hence, before looking in to the epistemological issues in this research, the following section will first briefly look into the objectivist and the subjectivist perspectives (Morgan and Smircich, 1980), as it is important to understand both sides of an argument and research problems often require compromise designs which draw from more than one tradition (Easterby-Smith *et al.*, 2002).

3.2.1 The two extremes: objectivist–subjectivist

Morgan and Smircich (1980) explained the nature of knowledge along a subjective-objective continuum. On one end, the objectivist epistemology holds that meaning exists apart from the operation of any consciousness. Truth and meaning reside in objects and careful research can attain that objective truth and meaning (Crotty, 1998). This is because ontologically, objectivists assert that social phenomena and their meanings that they use in everyday discourse have an existence that is independent or from social actors (Bryman 2004). They treat the social world like the natural world, as being hard, real and external to the individual (Burrell and Morgan, 1979). This view of the social world encourages an epistemological stance that emphasises the importance of studying the nature of relationships among the elements constituting that structure. It encourages a concern for an objective form of knowledge that specifies the precise nature of laws, regularities and relationships among phenomena measured in terms of social facts (Pugh and Hickson, 1976a, 1976b; Robson, 2002; Skinner, 1953, 1957).

At the other end of the continuum, the highly subjectivist holds that meaning does not come out of interplay between subject and object but is imposed on the object by the subject. This suggests that the object makes no contribution to the generation of meaning (meaning created out of nothing) which is to say, meaning comes from anything but an interaction between the subject and the object to which it is ascribed (Crotty, 1998). This is because ontologically, a subjectivist views reality as a projection of individual imagination (Morgan and Smircich, 1980) and thus has an alternative view of social reality, which stresses the importance of the subjective experience of individuals in the creation of the social world. Their main concern is to understand how

individuals create, modify and interpret their world. In extreme cases, the emphasis is placed upon the explanation and understanding of what is unique and particular to the individual rather than of what is general and universal (Burrell and Morgan, 1979). This disputes the objectivist grounds of knowledge as they are in favour of an epistemology that emphasises the importance of understanding the processes through which human beings concretise their relationship to their world (Morgan and Smircich, 1980).

Hence, the grounds for knowledge in each of the epistemology discussed above are different because the fundamental conceptions of social reality (ontology) to which they subscribe are at the two extremes of the continuum (Morgan and Smirch, 1980). At one extreme is the determinist which regards man and his activities as being completely determined by the situation or 'environment' in which he is located whereas at another extreme is the voluntarist view that man is completely autonomous and free-willed (Burrell and Morgan, 1979). The central question here is whether social entities can and should be considered objective entities that have a reality external to social actors, or whether they can and should be considered social constructions built up from the perceptions and actions of social actors. Insofar, as social science theories are concerned, to understand human activities researchers must incline implicitly or explicitly to one or other of these points of view or adopt an intermediate standpoint which allows for the influence of both situational and voluntary factors in accounting for the activities of human beings. As a result, intermediate points of view have emerged where objectivity and subjectivity have been brought and held together indissolubly. One of the epistemologies that do precisely that is constructionism (Crotty, 1998).

3.2.2 The intermediate standpoint – social constructionism

Constructionism puts all understandings, scientific and non-scientific alike, on the same footing as they treat them all as constructions. From a constructionist viewpoint, there is no meaning without a mind and meaning is not discovered, but constructed (Crotty, 1998). This implies that meaning cannot be described simply as objective since there is no objective truth and meaning does not inhere in the object merely waiting to be discovered. By the same token, it cannot be described simply as subjective where meaning is imposed upon reality because ontologically, a constructionist asserts that social phenomena and their meanings are continually being accomplished by social actors. For them, the world is 'always already there' and they may be meaningless in itself (Heidegger, 1949; Merleau-Ponty, 1962). They assert that meaning comes into existence only when individuals engage with the realities in the world (Crotty, 1998).

Hence, knowledge of the world does not reflect an objective world and is not isolated from that which the individual considers reality to be, but an understanding of the world as it is experience (du Toit, 2003). This means that the creation of knowledge is not a solitary process and thus does not take place in isolation. Instead, meaning is a result of interaction with others and is collectively created within relationships over a period of time. This indicates that an increase in relationships means exposure to different knowledge which results in an increase not only in knowing, but also in what is known (Gergen, 1997; Gergen and Gergen, 2003). Thus, as suggested by Gergen, (1985), instead of focusing on the matter of individual minds and cognitive processes, attention should be turned outward to the world of inter-subjectively shared social constructions of meaning and knowledge. Gergen labelled this approach as social constructionism

because it more adequately reflects the notion that the world that people create in the process of social exchange is a reality that is unique and of its own kind.

Thus, social constructionism does not focus on the meaning-making activity of the individual mind but it focuses on the collective generation of meaning as shaped by social processes (Schwandt, 1994, 2000). Ontologically, they do not see their world as a map reflecting what is out there, but the product of a communal interchange (Gergen, 1985), between people within relationships. From their viewpoint, the social phenomena exist not 'out there' but in the minds of people and their interpretations where each of the different socially constructed perspectives of the world requires a related action and as these perspectives of the world change, so do the corresponding actions (du Toit, 2003). Hence, this socially constructed reality is seen as an on-going dynamic process where reality is re-produced by individuals acting on their interpretation and their knowledge of it. It can be seen here that social construction describes subjective, rather than objective reality, that is, reality as individuals perceive it rather than reality as it is, separate from our perceptions (Berger and Luchmann, 1966). This means that different individuals may construct meaning in different ways, even in relation to the same phenomenon (Crotty, 1998). Their rendition of reality is unique (Gergen, 1985) because as they are exposed to an increased and varied truth, they constantly redefine it and it becomes difficult to define the precise nature of truth.

3.2.3 Philosophical position of this research

In this research, the aim is to gain insights of the values and impact of CoPs' membership as perceived by individuals. It focuses on individual's unique experience

concerning the perceived values constructed through and with others when participating as a member of CoPs. Through CoPs, individuals negotiate a shared understanding of knowledge held within their community and from these interactions, collective ideas and views are exchanged thereby constructing value or meaning to members. These socially constructed meaning is different in many ways because there are different experiences in different relationships as members interact with other members and the environment over a period of time. It is through these interactions individuals reflect on their experiences and construct their perceptions of the values and impacts of participating in CoPs which affect their future behaviour and actions. This approach is very much grounded in the social constructionist approach as proposed by Schwandt (1994, 2000).

Hence, the nature of this study is very much in line with the social constructionist viewpoint and this is the approach adopted and is the root of epistemological considerations that form the central thrust of this study. By taking the social constructionist standpoint, the researcher can gain insights into individuals' socially constructed meaning as they participate in CoPs at different phases of their membership. Also, it allows the researcher to gain understanding of the different perceived values of CoPs' membership in many ways even though it is in relation to the same phenomenon because it recognises that each individual creates their own perception and this is an active process that exists neither in the head, sense organs or the environment alone but in the interaction between members in the CoP. Therefore, taking this philosophical position, the researcher does not accept that there is an objective truth that this research must identify. Rather, attention is given to individuals' reflection or interpretation of their experiences of the meaning they construct out of the social interaction or

participation in CoPs. This has shaped the kind of question the researcher is interested in and the way she wants to ask them i.e. what are an individual's perceived values of being a member of a research-based CoP, why have they perceived these experiences to be valuable and in what way it has helped them in terms of doing research. It is particularly of concern in individual's perceived value of CoPs and it is hoped that through this research individuals can reflect and become aware of the potential benefits of CoP's membership and therefore consciously continue to use CoP as a mechanism to improve their research. Thus, the central thrust of this research is to explore and to gain insight of the perceived value of CoPs' membership through an interpretive lens with a view to understand, from an individual's perspective, their experience of the impact and value they construct through their interaction or participation.

3.3   THEORETICAL PERSPECTIVE – INTERPRETIVIST

The theoretical perspective is the framework within which knowledge is produced and a way of looking at the world and making sense of it (Crotty, 1998). It is also known as paradigm defined as the basic belief system or worldview that guides the researcher, not only in choices of method but also in ontologically and epistemologically fundamental ways (Guba and Lincoln, 2000). They indicated that in a research journey, inevitably a number of assumptions are brought into the chosen methodology. By expounding the theoretical perspective these assumptions are taken into account to justify wherein such assumptions are grounded and this is the purpose of this section.

This research adopts the social constructionist standpoint with the purpose to study individual's experiences of the values and impact of participating in CoPs. Under such

circumstances, Easterby-Smith *et al.*, (2002) have suggested researchers to concentrate on the interpretation of the different constructions and meanings that individuals place on their experience, with a view to trying to understand and explain why they have different experiences and their underlying meaning. Also, these authors have suggested that in order to understand this world of meaning researchers must interpret it because an individual acts toward things on the basis of the meaning that these things have for them which is derived from and arises out of the social interaction that the individual has with others (Blumer, 1969).

Taking the above suggestion, this research takes the interpretivist paradigm where the researcher tries to gain understanding of individual's interpretation of the value they derived out of their engagement in a CoP as a member. Also, it seeks to interpret why individuals find their participation or the social interaction worthwhile or meaningful and why they continue to be members of CoPs. When reflecting on their experience, these meanings are handled in, and modified through an interpretive process used by the individual in dealing with the things that he/she encounters in the CoP. They continually interpret the meaning of their environment and act on the basis of the meanings that they attribute to their acts and to the acts of others members (Bryman, 2004). Therefore, it can be seen that effectively, the researcher is trying to interpret individual's interpretation of the value they construct out of their participation in a CoP as a member.

In doing so, there are some beliefs which underlie much of the interpretive thinking and act as the basis for this approach in this research. These persuasions are predicated on the following assumptions and fundamental beliefs of the interpretivist paradigm.

- Interpretivists take a different approach to understanding social beings and their world (Ozanne and Hudson 1989). For them these realities can be comprehended only as gestalts, that is holistically (Hirschman 1986). They emphasise the totality of the human being which emerges through the course of their lives (Hirschman and Holbrook, 1986) and they see the world as arenas of social interaction, based on the belief that reality is socially constructed by individuals, where there is no clear–cut objectivity or reality (Bogdan and Taylor, 1975; Bryman, 2004; Crotty, 1998). Instead, reality is determined by the way in which we experience and understand those worlds which we construct and reconstruct for ourselves in interaction with others (Huczynski and Buchanan, 2001).

- This means that the world is given meaning by individuals thus explaining why it is subjective and why individuals have different experiences (Bryman, 2004; Bogdan and Taylor, 1975; Crotty, 1998). Therefore, as individuals interact with others and their environment, they construct multiple realities (Hirschman 1986) as they continually change their needs and behaviour depending on their own internal states and their environment (Szmigin and Foxall, 2000).

- Given the subjectivity, an important role of the interpretivist is to interpret the meanings and actions of individuals according to their own subjective frame of reference (Williams, 2000). They study individuals' internal mental states, patterns of meanings and interpretations, to discover how experience is understood (Huczynski and Buchanan, 2001). In other words, the interpretivist paradigm is concern with individuals' subjective experiences from their point of view and understands their world as it is (Bryman, 2004; Bogdan and Taylor, 1975; Crotty,

1998). This means that an interpretivist study the phenomena from the perspective of individuals involved with the phenomena rather than individuals as part of the physical world (Hirschman 1986) and they see this process as interactive and the researcher cannot distance him/herself from the phenomenon nor can the phenomenon be understood without the personal involvement of the researcher.

Based on the above, it can be seen that by studying individuals through the lens of an interpretivist, the researcher can understand individuals' subjective experience in CoPs and the value they gained from the membership. This accepts that individuals construct their perceptions of the values of CoPs' membership through the social interaction with others and their environment and that each individual construct and reconstruct different experiences based on their needs through the course of their everyday life, thereby constructing multiple perceived values. Therefore, individual's participation in CoPs is a process of continuous emergence rather than a static state (Crotty, 1998; Hirschman and Holbrook, 1986). This rejects the positivist paradigm as their nature of reality is that a single unchanging reality exists, which is divisible and fragmentable whereas the interpretivists believe reality to be mental and perceptual with different perceptions resulting in different realities (Hirschman, 1986; Ozanne and Hudson, 1989). Positivists take natural sciences as a model and the methods of natural sciences are not suitable for this research because people are not just natural elements but social persons with their own perceptions and interests as they interact in their world (Bryman, 2004; Sarantakos, 1998; Symon and Cassell, 1998) and they need to be considered holistically (Hirschman, 1986). Moreover, positivists attempt to neutralise researchers as far as possible their influence on the researched (Easterby-Smith *et al.*, 2002) but in this research, taking the

interpretivist stance, personal involvement of the researcher is required in order to help to take the position of the participant and to draw out individuals' perception as seen by the individuals themselves (Hirschman, 1986; Sarantakos, 1998). Therefore, objectivity is not necessary in this research as it cannot capture the real meaning behind individual's perception whereas interpretivism respects the differences between people and the objects of the natural sciences so as to grasp the subjective meaning of social action (Bryman, 2004; Hirschman, 1986).

Moreover, an interpretivist approach is to find out what are happening out there but not changing what is out there and therefore rejecting the possibilities of action research that aims to contribute both to the practical concerns of people in an immediate problematic situation by joint collaboration between the researcher and the researched with the aim to make changes within a mutually accepted ethical framework (Rappoport 1970). In this research, the aim is not to change or modify the meaning constructed by individuals or changing the situation in CoPs. Instead, what matters most is individual's subjective experience as they participate and interact with others and their environment. The aim is to try to understand individuals' experiences in their own terms, which is real to them and to bring to light or illuminate individual's perception of CoPs' membership. Hence, data are collected and analysed in ways that do not prejudice individuals' subjective character and the researcher strives to construct a "thick description" (Geertz, 1973) of the phenomenon under study, which describes its complexity and individuals' internally constructed meaning.

In summary, the discussions above have clarified and justified the social constructionism epistemology and the interpretivist paradigm that underlies this research as it is about interpreting a social world which individuals have constructed and reproduced through their continuous participation in CoPs. By unpacking the underlying assumptions it has shaped the research question and will guide this research's design to collect relevant data to achieve its aim. Hence, it guides the chosen methodology, helps to provide a context for the research process and grounds its logic and criteria in observing, in interpreting, in reporting and everything else done by the researcher. These will be discussed in detail in the next section.

3.4   QUALITATIVE METHODOLOGY

The epistemology and theoretical perspective outlined in the previous chapter have shaped how the researcher sees the world and acts in it and thereby influenced the selection of the methodology, which then dictates the character of the data-gathering approaches. Both quantitative and qualitative approach can be adopted in interpretivism but the discussions above reinforced that the social world should not be studied according to the same principles, procedures and ethos as the natural sciences (Bryman, 2004) because, while quantitative research provides objective measures for the treatment of data, large samples and the statistical validation for study, it has been criticised for only scratching the surface of people's attitudes and feelings, where the complexity of individual's being is lost through the counting of numbers (Wright and Crimp, 2000).

Since this research is interested in the subjective experience of members of a certain social group, what is needed is a research approach that seeks to explore the more

complex side of individuals (Hill and Wright, 2001) and that is more sensitive to interpret individuals' social world in greater detail (Bryman, 2004). This calls for a qualitative approach as it is more sensitive to interpret individuals' social world (Schutz, 1967; Bryman, 2004) compared to the quantitative approach. It enables the researcher to provide rich and thick data when reporting the results of this study as it allows probing beneath surface appearances of the underlying values of CoPs' membership and it includes data that cannot be rigorously examined or quantified (Denzin and Lincoln, 1994, 2005; Strauss and Corbin, 1990). Additionally, since this research is explorative in nature, adopting the qualitative approach allows the researcher to enter the research setting using only a tentative research framework or focus in mind and letting the research evolve. This is very much inductive and does not set the limits to the areas of enquiry too much (Creswell, 1994; Guba and Lincoln, 1994; Patton, 1987) and allow data on individuals' perceived values to emerge from the researcher's interactions in the research setting (Hill and Wright, 2001). The data collected may be in the form of spoken or written words, not constrained by predetermined standardise categories.

Hence, the qualitative approach enables the researcher to provide a great deal of descriptive detail or thick descriptions (Geertz, 1973) of individuals' experiences and the meanings they place on their participation in research-based CoPs' activities as qualitative data are often described as rich and deep (Bryman 1988; Denise, Tagg and Holloway, 2000) and they can give a full account of social settings, activities or individuals with which it is recorded. In other words, they can describe and illuminate the context and conditions under which this research and individuals' behaviour take place. This can help to answer the what, when, how and why questions thereby

providing a holistic view, through participants' own words and perceptions, of how they understand, account for and act within these situations (Marshall and Rossman, 1995; Miles and Huberman, 1994).

The aim of the researcher is to get as close as possible to the world of CoP members and to interpret this world and its values from the inside. The researcher wishes to describe both unique and typical experiences and events as bases for individuals' perception of the value of their membership (Dyer and Wilkins, 1991). Having the "how" and "why" questions in mind, the case study methodology is deemed appropriate in this research as it is concerned with the complexity and particular nature of the case in question (Stake, 1995). Essentially, each CoP is the subject of an individual case study, but the study as a whole covers several CoPs and in this way uses a multiple-case design. The essence of a case study is that it tries to illuminate a decision or set of decisions: why they were taken, how they were acted upon, and with what outcome (Schramm, 1971). It is an inquiry that investigates a current event within its real-life context, especially when the boundaries between event and context are blur and researchers have little control over the event (Yin 1981a, 1981b, 2003).

These properties of case study have made it more appropriate for this research since this study seeks to explore the complex interactions and relationships in CoPs and tries to illuminate individual's perception of CoPs' membership. It allows the researcher to ask questions such as what are the perceived values of being a member of a research-based CoP, why are these values seen as valuable, how it has helped them in their research and how it has impacted them personally and/or professionally. Additionally, this allows the

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researcher to gain insights of these questions within the context of the research-based

CoPs concerned i.e. the members, the activities, the social interactions, which is

dynamic and beyond the control of the researcher. This is useful because the researcher

deliberately wanted to cover contextual conditions, believing that they might be highly

pertinent to determine individuals' actions and their perceptions of the value of CoPs'

membership.

The case study is one of the several research strategies that are available. Other ways

include experiments, surveys, histories and the analysis of archival information. Case

study distinguish itself from others such as experiment because experimental strategies

deliberately separate a phenomenon from its context so that attention can be focussed on

only a few variables and typically the context is "controlled" by the laboratory

environment (Bryman, 2004; Yin, 2003), which is not the case in this research and

therefore not suitable. By comparison, the historical strategy is also ruled out because

although they consider the entangled situation between phenomenon and context, it is

usually with non-contemporary events. As for surveys, they can try to deal with

phenomenon and context, but the ability to investigate the context is extremely limited

as they tend to limit the number of variables to be analysed (Yin, 2003). Hence, clearly

case study is suitable for this research as it copes with the distinctive situation in which

individuals act in their respective research groups and it is comprehensive as it can

comprise of an all-encompassing method to provide many more area of interest than data

points. Taking the suggestion of Bryman (2004), this research has employed qualitative

methods such as observation and interview because they are viewed as particularly

helpful in the generation of an intensive, detailed examination of a case. The following

sections will address their justification and the issues involved when employing them.

3.5   RESEARCH METHODS

The array of methods available within the qualitative approach is extensive and it

requires more than one data-gathering instrument to accommodate the situations that

arise in the research context (Hill and Wright, 2001). The choice and adequacy of the

chosen methods in this research embody its philosophical assumptions (as mentioned in

Section 3.3) as well as the aim of this research (Morgan and Smircich, 1980). Given

these influences, the data collection methods employed in this research are observation

and interview where both methods are complementary: observation is followed by

interview which is built on the data that emerged from observations and from the

theoretical framework (CoP concept, perceived value and research in HE). Each method

is explained and justified in the following sections.

3.5.1   Observation

Observation is mainly used in qualitative research as it is highly exploratory in nature

(Boote and Mathews, 1999) and it is able to collect data that are difficult to quantify

(Bryman, 2004). It usually takes place in natural environments and this allows

participants to be more relaxed, thus giving a truer picture of the phenomenon as

reactivity is minimised (Bryman 1992). Hence, employing observation in this research

gives direct access to explore the social interaction and the context of the research

groups targeted. Observation was conducted in the normal setting of the research groups

i.e. during one of each research group's meetings to observe members' participation and

how they interact in the research groups which is in line with the social constructionists' standpoint of meaning constructed through social interaction. This allowed the researcher to see members in action and to gain a sense of the research group's context which is essential for further data collection and for further understanding and analysis of data. Since observation is a flexible technique (Simpson and Tuson, 1995), it allowed the researcher to record the behaviour of members in the form of field notes, recording as much as possible or whatever is most readily observed (Altman, 1974).

These data are useful and necessary because usually what people say is often different from what they do (Robson, 2002) and observation provided the researcher with a better picture of individuals' actions in situations where they do not wish to reveal their behaviour or where they genuinely do not have a conscious reason for their behaviour (Boote and Mathews, 1999). From these data, the researcher aims to interpret members' action and language within their group's setting and to capture the nuances and characteristics of the research group's setting (Williams, 2000). It gave the researcher a sense of the research group's context that enabled her to comprehend what was said by members during the interview with reference to its context. Moreover, these data helped to build up interview questions in order to follow-up and to gain further insights on the behaviour of members in that setting and their group activities which helped to elicit or interpret the meanings members attribute to their environment and behaviour. In other words, the observation data were used to enrich and supplement data gathered by interview and this is why observations were conducted up-front, before the interviews, to help uncover promising areas of investigation for further study (Bryman, 1992).

The types of observation vary considerably depending on the role of the researcher in the research setting i.e. whether it is covert or overt observation and the level of participation (Bryman, 2004). In this research, the researcher's role is that of a passive participant observer as described by Patton (2002) where the researcher is present at the scene of action acknowledged by the members in the research group but she does not participate or interact with the research group's members to any great extent (Spradley, 1980). The researcher's role in the process is that of a bystander or spectator because she is aware of the impact of her presence. Thus, the researcher attempted to refrain from developing additional personal relationships with the research group's members and to keep the influence of her presence to a minimum. More specifically, the researcher participates as a researcher or as an outside observer, not as a member or an insider. This is because the researcher does not share their same interest or the domain of the research group and it takes a couple of meetings and active participation to become a legitimate member. Therefore, participant observation (overt observation where the researcher participates actively) is not favoured and the researcher seeks to observe what happened naturally and spontaneously within the research groups during the meetings and tried to keep her intrusion to a minimum when observation was conducted. Also, covert observation (observation conducted without the knowledge of members) is not possible as these research groups' meetings are conducted in public place and they are only for members and others through invitation.

Therefore, the advantages of passive participant observation are it makes the presence of the researcher to be not so prominent and with minimum intervention to let members behave naturally in the research setting yet able to observe the social interaction of the

research group. Throughout the meetings, the researcher approached with a wide-angle of lens, taking in a much broader spectrum of information. She wrote down what members said and watched them in action. The focus was on their behaviour, the communication processes, the types of activities and the meaning that people attach to their actions, their reactions, facial expressions and other non-verbal clues to gain further insights. These observations gave pictures of what took place and helped the researcher to interpret and to provide an account of why things have happened thereby enabling her to gain an appreciation of the research groups' context. Field notes were taken on the spot and some are recorded later, immediately after the researcher has left the meeting. This highlights one of the disadvantages of observation because there was not sufficient time to take notes or to raise questions about events from different perspectives (Yin, 2003). Therefore, interviews were used to follow-up further interpretation and to gather further data for more insights into the topic under study.

3.5.2 Interview

The interview is probably the most widely employed method in qualitative research (Bryman and Bell, 2003) and is one of the most important sources of case study information (Yin, 2003). It is deemed to be appropriate when questions require a good deal of thought and when responses need to be explored and clarified (Easterby-Smith *et al.*, 2002). This gives researchers the opportunity to probe deeply to uncover new clues, open up new dimensions of a problem and to secure vivid, accurate inclusive accounts that are based on personal experience (Burgess, 1991). Indeed, it allows both parties to clarify the nature and the purpose of the research, to explore particular responses and to build rapport and trust quickly in order to obtain valuable information. Apart from being

able to collect data on what has been said, it also enables the researcher to identify non-verbal clues that are present, for example, the inflection of the voice or facial expressions (Easterby-Smith *et al.*, 2002).

For these reasons, an interview is seen to be an appropriate method to gain further insights in this study because as mentioned in Section 2.4.4, one of the ways to surface value is to ask members themselves, reflecting their experience to recognise the value of participating in the respective research-based CoPs (Stahl, 2003). Since individuals are not normally conscious of the value of an idea or even remember where they got it, interviews are often the only way to surface it (McDermott, 2000) because it can help jog or re-live members' memories and this is when they make sense of and interact with their experience of engaging in their research group. By asking members about the problems they encountered; hot topics of their meetings; discussing what individuals would have done without the research group's input; why they have joined the research group; and how the membership has helped them in their research, have helped participants to identify, clarify as well as interpret the value of the research group's membership. In fact, these interviews have helped to raise member's awareness of the connection between their research group's activities and the value of its membership.

Therefore, when formulating the interview questions, the researcher has referred to the theoretical framework and also the data that have been collected through observation to serve as a platform for the researcher to make clarification of inconsistencies and to probe further for more in-depth details (Bryman, 2004). In this sense, semi-structured interviews were conducted as the researcher has entered the interview process with some

possible views and questions in mind, having a fairly clear focus on specific issues that need to be addressed which is often referred to as an interview guide (Bryman and Bell, 2003) or an interview protocol (Wenger *et al.*, 2002a; Yin 2003). However, the participant has a great deal of leeway in how to reply as the questions are not followed on exactly in the way outlined on the schedule (see Appendix I) and may vary in the sequence when they are being asked. In fact, since this research is inductive, most questions are open-ended to ensure exploration as well as make further investigation of the values of CoPs' membership mentioned in the literature. Therefore, at times, questions that are not included in the guide are also asked as and when the researcher picked up on things said by the participants (Bryman, 2004). Generally, all of the questions were asked. Although the researcher will be pursuing a consistent line of inquiry, the actual stream of questions in the interview was fluid rather than rigid (Rubin and Rubin 1995). Hence, the interview has followed a fairly standardised set of questions, whilst offering some flexibility, and allowing the views of the participant to become known (Easterby-Smith *et al.,* 2002).

So, in this research, it can be seen that the combination of interviews and observation give a fair and general picture of what members think about their CoP membership where personal and experiential details as well as data of the group's context were revealed. It is worth noting here that the interviews were made to give a both wide and specific understanding of what researchers perceived about the values of CoPs' membership, how they interact, what the participation really looks like. These data encompassed participants' own participation in these research-based CoPs, which is why they were able to reveal opinions and details according to their own self-experienced

instead of expressing their ideas about matters in general (Melin, 2000). Some of the difficulties the researcher faced during the interviews are to get hold of participants to focus on the phenomena being studied and to tease out more in-depth data. This is because as mentioned in Section 2.4.4, individuals cannot interpret everything as the value of community participation is often invisible or tacit. Consequently, after the pilot study, interviews were supplemented by other tools such as storytelling and critical incident technique (CIT) which are interconnected methods to get a better fix on the subject matter on hand (Brewer and Hunter 1989; Denzin and Lincoln, 1994).

3.5.2.1 Storytelling

Storytelling is used in this research since it is an appropriate mechanism for qualitative research as stories are excellent ways of conveying hidden meaning which is usually difficult to get out (Boje, 1991). This is because people like telling stories and a story gives an account of incidents or events (Boje, 2001) and they are made up of narratives which are seen as the vehicle through which meaning is created in the moment of telling (Luhman and Boje, 2001). In this research, when telling a story, members explained and expressed themselves by reducing the complexity of their environment to a level from which they can make sense of their participation in their research groups (Weick, 1995) thereby interpreting and constructing meaning where they coalesce their experience in a meaningful way (Dougherty, Borrelli, Munir and O'Sullivan, 2000). In doing so, members re-live their experience (Boje, 1991) and present information in a plot (Boje, 2001; Czarniawska, 1998) where there is sequence of events with a beginning, middle and an end (Connelly and Clandinin, 2000; Kermode, 2000; Labov, 1972; Ricoeur, 1984; White, 1980), in a way the researcher can empathise with.

Thus, by using storytelling to supplement the interviews, members find it easier to transfer information and to express themselves in a story format (McDermott, 2000). This helped to tease out the experience that is unique to the individual as these data are personalised information told in their terms. These stories convey much understanding of member's experience because they are told in the context of the research group and these contexts conveys emotions, triggers individual and group memories (Gill, 2001). When telling them, members convey their thoughts by bringing together pieces of information, weaving themes together in a compelling way that connects between the research groups' activities and member's perceived value of its membership, giving a sense of the context in which the experience has been developed (Newell *et al.,* 2002), i.e. what they did during the meetings, what happened, how they felt, why they behave in such a way, what mattered to them and etc. By sharing their descriptions and their lived experience members provide a descriptive account which captures the richness and detail of the values they construct from their membership of these research groups. Therefore, stories are inclusive and using this approach will open up all sorts of data for the researcher. By collecting these stories, by listening and comparing different accounts, by investigating how narratives are constructed around specific activities, by examining which events generated the stories, the researcher gain deeper access into member's reality (Gabriel, 1998; Gabriel and Griffiths, 2004).

However, stories sometimes can be misleading when they are unrepresentative or inaccurate. Yet, taking the advice of Gabriel (1998), when collecting stories, instead of paying attention to its accuracy and veracity, the researcher has relaxed the quality of data but let members make their point since the prerogative of story telling should be

with the member, the storyteller. After all, agreeing with Gabriel's argument, stories do

not present information or facts about event, but they enrich, enhance and infuse facts

with meaning. This is both the strength and weakness of story telling. Apart from

getting participants to tell a story, they are sometimes asked to focus on a particular

incident or a particular meeting that is critical to them thus using another tool known as

the critical incident technique (CIT) which will be discussed in the next section.

3.5.2.2 Critical Incident Technique (CIT)

Critical incident technique (CIT) is a tool proposed by Flanagan (1954:327) and he

defines it as

> 'a set of procedures for collecting direct observations of human behaviour in such
> a way as to facilitate their potential usefulness in solving practical problems and
> developing broad psychological principles'. By 'incident', Flanagan meant any
> observable human activity that is sufficiently complete in itself to permit
> inferences and predictions to be made about the person performing the act. To be
> 'critical' the incident must occur in a situation where the purpose of intent of the
> act seems fairly clear to the observer and where its consequences are sufficiently
> definite to leave little doubt concerning its effect.

This technique has been used by qualitative researchers to great effect, particularly in

conjunction with in-depth interviews (Easterby-Smith et al., 2002) and it has been used

as an investigative tool in organisational analysis from within an interpretive or

phenomenological paradigm (Chell and Adam, 1994). Employing this technique

requires participants to track back to particular instances in their lives and to explain

their actions and motives with specific regard to those instances (Easterby-Smith et al.,

2002). Thus, in this research, during the interviews, participants were asked to recall

and identify critical incidents they had encountered in their research group's meetings

and to describe them in considerable detail. The question were, for example, what

incidents in your opinion had impacted you in terms of research after you have joined the research group, how has it benefited you and why. The perceived value identified from the incidents associated was then used to further elicit evidence which impacted individual's development personally and professionally. They were asked to give detailed descriptions of how they handled the incident in each case and where appropriate, how they felt, who else was involved, what part they played and what the outcome was for them.

The strength of this technique is that it has enabled a focused discussion around the values and impacts of individual's membership and has facilitated participants to disclose incidents that are of critical importance to them. Also, similar to storytelling, these incidents are discussed in context and are also a rich source of information on the conscious reflections of the immediate party (the participant), their frame of reference, feelings, attitudes and perspective on matters which are important to them. The linkage between context, strategy and outcomes can be teased out because this technique is focused on an event which is explicated in relation to what happened, why it happened, how it was handled and what the consequences were (Symon and Cassell, 1998). However, some of the disadvantage of CIT is that the accounts are always retrospective and not all incidents are recalled (Chell, 2004). In terms of the former, in this research, as argued in Section 2.3.4, individuals need to participate in order to construct value as they interact and it is upon retrospective evaluation that they make sense of the values and impact of their membership. As for the latter, the researcher argues that the fact that the incidents are told, they are critical to participants and usually they have very good

recall. More importantly, it provides a focus which enables the researcher to probe aptly and which the participant can concentrate on.

3.5.2.3 Interview as a co-construction process

The two techniques mentioned above are used depending on what is available in the context and what the researcher can do within that research setting. This is because from a social constructionist's point of view, these interviews are seen as an interaction between the researcher and the participant, depending on what is asked and what has been told. More specifically, the stories and the incidents collected are not solely made by the participants but are jointly constructed during the interviews between the researcher and the participant (Lieblich, Tuval-Mashiach and Zilber, 1998; Mishler, 1997). Therefore, the interview is an interactive process where both parties jointly construct meaning. The contents as well as the interpretation of member's experience were highly affected by this co-production (Cortazzi 2001). This is because in listening to stories, the researcher's personal experience mingles with what was heard and seen. She then clarify things out; she followed up things and this helped participants to further make sense of what they were telling and it brought the researcher to what she wanted to find out. Therefore, participants engaged in an evolving conversation (Mishler, 1986) where the researcher was a co-producer of the participant's story (Boje, 1991).

Indeed, the researcher played several roles in this process. She played the role of a listener, hearing the stories in a receptive mode rather than in the reactive mode. This means that when listening to stories, the researcher lowered her defences to absorb what she was hearing instead of concentrating on preparing responses and questions (Gill,

2001). She followed the ebbs and flows of the stories and at appropriate points she joined in the conversation that matched the pattern of the story to leave room for exchange. Therefore, the researcher also played the role of a facilitator or a co-participant who jointly produce meaning in the conversation (Gubrium and Holstein, 2002), as clarifying questions and questions to encourage the participant to develop the story were asked (Pejlert, Asplund and Norberg, 1999). For example, participants were asked questions such as what happened and then what took place. In doing this, one story leads to another and the researcher helped the participant to explore associations and meanings that might connect several stories. Also, the researcher gave up some control to open up the interview to extend narration by the participant (Riessman, 2004). Thus, in this research, interviewing is a co-construction, a conversation, an interactional achievement, a joint production and collaboration between the researcher and the participant (Goodwin, 1984, 1986; Goodwin and Goodwin, 1987; Duranti and Brenneis, 1986; Lerner, 1992; Mandelbaum, 1993).

In summary, the methods used for data collection are very much influenced by the methodological framework of this research (see Figure 3.1). The approaches of the methods are consistent with the epistemological grounding of this research i.e. social constructionism (as mentioned in Section 3.2.3) where meaning is constructed through interaction and its interpretive paradigm to interpret members' experience from their own perspective i.e. their stories or incidents. By adopting the qualitative methodology together with both observation and interview, it allowed the researcher to collect rich and thick data that facilitate the researcher to interpret the underlying values of CoPs'

membership. The following chapter will detail the research design and process, together

with how data were analysed to reach the outcomes of this study.

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│  │          METHODS              │  │
│  │      Observation and          │  │
│  │   Interview (supplemented by  │  │
│  │     storytelling and CIT)     │  │
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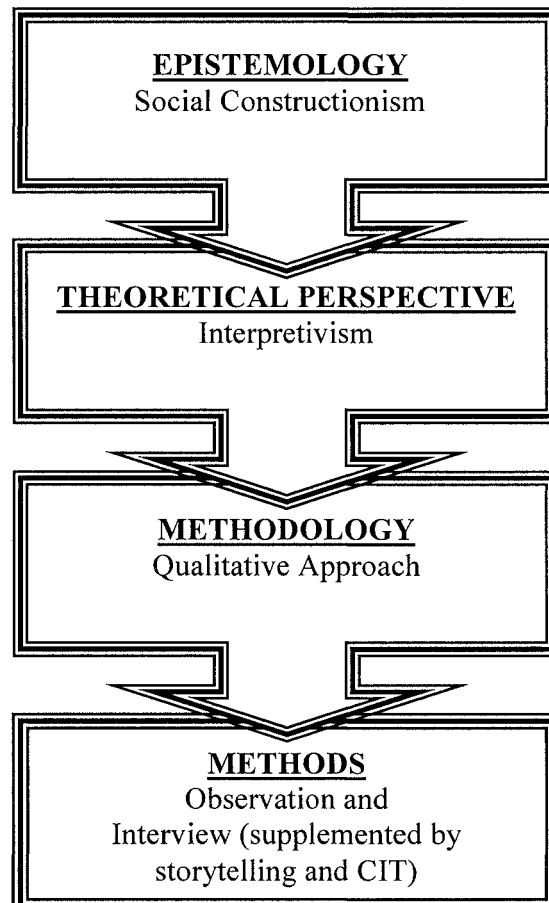
Source: Adapted from Crotty (1998)

Figure 3.1: Methodological Framework

CHAPTER 4

RESEARCH DESIGN AND DATA ANALYSIS

4.1   INTRODUCTION

This chapter extends the previous chapter where it considers the research design, data collection process and data analysis.   It discusses the key considerations when designing this research and explains the research process, detailing its issues and steps taken to ensure the collection of credible data. This is followed by looking into how these data were analysed, including authenticity issues and the role of the researcher in conducting research on CoP members.   Finally, the chapter will conclude by considering some of the ethical concerns of this study.

4.2   RESEARCH DESIGN

Research design is the logic that links the data to be collected and the conclusions to be drawn to the initial questions of study (Yin, 2003).   Its choice involves decisions about the priority given to a range of dimensions of the research process and it provides a framework for the collection and analysis of data (Bryman, 2004). Thus, this section will discuss the design of this research, explaining how these research activities were organised to help achieve its aim and to avoid the situation in which the data do not address the research question (Easterby-Smith *et al.,* 2002).

4.2.1   Multiple-case design

Given that this study has identified and involved five different research groups, it has used multiple-case design to gain insights of individuals' experience and the

perceived values they construct out of participating in their respective research-based CoPs. This methodology enabled the researcher to zoom in into individual's personal perspective and also to zoom out to see how individuals interact with and are influenced by the context or the environment of the research group. Basically, each group is an individual case study in its own right due to its make-up and unique environment. Each case is defined using the three fundamental elements of a CoP's structure (as mentioned by Wenger *et al.*, 2002a in Section 2.3.1 – domain, community and practice) and the focus is on individual's perceived values of CoPs' membership.

Due to the nature of the subjectivity in individuals' perception and the uniqueness of the context of different research groups, the multiple-case design allows for the coverage of broader and diverse context and perspectives. In each case, individual's responses were compared and corroborated when references were made to a particular context or between each other whereas between the cases, similarities and differences can be drawn. By doing this, each case is treated uniquely as well as making comparisons between cases to draw emerging perceived values, bringing out possible similarities and differences. Hence, the advantage of multiple-case design is the evidence from multiple cases is considered more compelling and the overall study is therefore regarded as being more robust (Herriott and Firestone, 1983).

Apart from the comparative logic, multiple-case design is considered to be comprehensive (Stoecker, 1991) as it allows for methodological rigour (Eisenhardt, 1991) because multiple sources of evidence have been used, with data needing to converge in a triangulating fashion. The researcher was able to interpret and to gain

further understanding of how members of these research-based CoPs understand things, the meaning they attach to happenings and the way they perceive their reality. Therefore, the chosen methods in this research i.e. observation and interview were designed appropriately to collect data that can help to clarify and interpret the subjective experience and the perception of individuals.

4.2.2 Observation design

The passive participant observation is designed in a way that the researcher is able to attend and participate in one of the research group's meetings, allowing her to have a picture of the normal environment members are interacting in without being too intrusive. The observation was unstructured so that the researcher can have a broader view and more data points, trying to capture whatever is possible in terms of the context and the process, thereby constructing an account of the meetings. These accounts were used to interpret or contextualise the interview sessions.

Therefore, this method is used in the early stage of this research i.e. the exploratory phase, to find out how these research groups functioned as a precursor to subsequent inquiry of the insights obtained, following it up through interviews. This means that the observation data served to build up data for interviews, to give understanding of the research group's context and to corroborate the data obtained from interviews. In doing this, it reduced the inherent difficulties in the credibility of such data, arising from the problem of 'saying is one thing; doing is another' (Robson, 2002) and the wish to present oneself in a favourable light. Hence, these data were followed up or probed into during interviews to obtain more details or description. Both the methods i.e. observation and interview, were designed to complement each other as

specific questions were formulated for further study and to collect missing information or to resolve discrepancies from observation.

4.2.3 Interview design

In this research, the interview was designed in such a way that it gave an opportunity for the participant to give views of their participation in their research group. The primary purpose was to understand participants' perception of the values of their membership in the context of their research group. Thus, the interview has been designed so that there were opportunities for these insights to be gained and the researcher has to be sensitive and skilled enough not only in understanding participant's views, but also to assist them in exploring their own beliefs, attempting to know and interpreting the constructs that they used as a basis for their opinions about a particular situation (Easterby-Smith *et al.*, 2002). This implied that the interview was designed in an interactive or a co-construction nature (as mentioned in Section 3.5.2.3), giving a chance for the researcher to ask the how and why questions and leaving room for flexibility and sensitivity to the interview context.

In order to increase the quality or the thickness of data, storytelling and CIT were included as tools in the interview design to assist participants to focus and reflect on the incidents or events in their research group, trying to re-live what has happened, how they reacted and why it has impact on them. Through the exchange, it helped the participant to make sense of the before and after effect of joining the research group, trying to link the activities to their perceived value. In this way, individual's behaviour, attitudes, reactions, opinions, decisions and judgements can be converged

to draw conclusions on their perception. Thus, the types of questions asked during the interview plays a very important role to surface individual's perceived values.

4.2.3.1 Interview questions

As stated by Allee (1997), questions can help to open up participant's world and their awareness emerges in response to compelling questions because the more the questions are expanded, the data become richer. As a result, when designing the interview questions, careful thoughts were given as the kinds of question asked in qualitative interviews are highly variable depending on the interview situation. In fact, the kinds of questions the researcher is interested in and the ways it was asked were directed by the social constructionism epistemology and the interpretivism standpoint. More specifically, questions were based on Rescher's (1969) three aspects to understand value, as mentioned in Section 2.4.4. Questions were focussed on individuals' experience, trying to interpret the values individuals construct through the participation in their research groups. Employing the case study strategy allowed the researcher to ask a lot of how and why questions (Yin 2003) – what is the value being evaluated, how it has helped individuals in their research (the locus of value) and why it is valuable (the underlying value of their participation and its impact) – in order to interpret the values and impacts of individuals' participation.

In organising the set of interview questions (as exhibited in Appendix I), the researcher has adopted the suggestions of Kvale (1996) where questions were categorised under a list of topics to be covered but somehow in a looser format due to the interactive nature of the interviews. Questions were categorised under the topic of factual/contextual, follow-up, direct, probing, indirect and summary. The

factual/contextual questions were concerned with gathering specifics and contextual information of the research group, in particular, the background information of the member and the group, how they have first joined and how long they have joined. These questions set the context of the interview and allowed the participant to feel comfortable as well as to let the researcher gauge the participant's ability to express themselves thereby knowing how to approach the interviews by using appropriate interview tools. Consequently, follow-up questions were asked, such as, why did they join and continue joining the research group and how they felt when they first joined compared to present time, helping participants to see the before and after effect. These questions help to jog participants' memories and assist them to focus and reflect on their past and present experience. After that, direct questions that were related to the research questions were asked i.e. what are the benefits gained from CoPs' membership especially in terms of doing research. These questions can aid participants to link the research group's activities to the values of their membership. In order to further substantiate participants' reflection, storytelling and CIT may be used to help participants give an example by focussing on a story or an event. This gave participants opportunities to describe and explain the perceived values in context and allowed the researcher to ask probing questions e.g. what happened, how they reacted or behaved, how they felt and why, what were the consequences, why is it worth their time and energy and etc., to gain richer data and to cross check or follow-up observation data as well as the theoretical framework. This is because when participants describe the worth in their stories, they make sense and interpret the importance and justify the usefulness or uniqueness of the value of their membership (Cox, 2003), thereby helping to answer the research question. Towards the end, in the less structured portion of the interview, indirect questions such as how

the membership has helped them personally or professionally were asked to open up communication to explore other areas related to individuals' research. Finally, a summary question was asked to give a chance for participants to convey or to cover what has not been asked.

Overall, the interview questions were intended to get to the heart of the way individuals construct and experience their participation in research-based CoPs. The questions and probes encouraged participants to give specific, detailed examples of experiences, behaviours, actions and activities to help the researcher to interpret their perceived values of CoPs' membership. In essence, their opinions or stories have not only told the researcher about their initial experience but also their feeling and observation as they now participate in their respective research groups. Hence, it is acknowledged that these data are subjective and they do not have just one answer because there are many possibilities or different ways in asking a question as it depends on who asks them and under what circumstances, the mood of the participant, the familiarity of the subject material of the question to the participant and so on (Beer, 1997; Easterby-Smith *et al.*, 2002). This is why interviews were less structured and were designed in a way that they were focussed enough to collect data that help to answer the research question and yet giving some room of flexibility for participants to give their views. Thus, the success of the interviews also depended on how much structure was put into them.

4.2.3.2 Degree of structure

Jones (1985) highlighted that there is no such thing as research without presupposition and suggested that in preparing for interviews, researchers should

have some broad questions in mind, and as they interview, they see more patterns in the data and are likely to use this understanding to explore particular directions. Taking these suggestions, the researcher has prepared the interview questions in the format of an interview guide (Yin, 2003) or an interview protocol (Bryman, 2004; Wenger *et al.*, 2002a), which is not as specific as the notion of a structured interview schedule. A copy of the interview guide can be found in Appendix I. This guide is derived from the CoP literature, the observation data and the feedback from the pilot study (explained in Section 4.2.4).

The protocol is a guide to the journey the researcher wants the participants to take. It serves as a path the researcher suggests for participants to point out landmarks and markers they think are important for the researcher to understand and map the journey (Dilley, 2000). This is why these interviews are seen as an interactive process and a co-construction process with the researcher as one of the participant. Hence, the interview protocol is by no way for the purpose of strictly following it and to tie down the researcher but serves as a checklist of memory prompts of areas to be covered (Bryman, 2004; Wenger *et al.*, 2002a). It has a loose structure for the questions to be asked and this contributed to the success of the interview by setting clear and exact areas of the researcher's interest at the outset (Easterby-Smith *et al.*, 2002). Also, if the interview at some point has deviated from its purpose or lost its way in the course of listening to answers, these questions served as a guide to return to the frame of mind of the research question. Additionally, these questions formed a script for the researcher to structure the flow of questions reasonably well to lead the conversation pointedly yet comprehensively toward the research question (Dilley, 2000) because it provided some leeway to deviate from the sequence in order to

follow interesting lines of inquiry and to facilitate an unbroken discussion. It also enabled the researcher to follow the flow of the discussion and phrasing the interview questions in a different way that suited the pattern of the communication.

Overall, the researcher has attempted to cover all issues in the interview guide but the questions asked to each participant were tailored to the particular individual and the interview context (Miles and Huberman, 1994). So, what was crucial is that the questioning allowed the researcher to cover fairly specific areas of the research question while leaving some flexibility to the participants to give their views on their participation in these research groups.

4.2.4   Pilot study

In order to test out the effectiveness of the research design, a pilot study was conducted. It gave an opportunity for the researcher to make any modification to improve the research process or questions before the actual data collection. The researcher has conducted one observation at a meeting and three interviews with randomly selected members of a selected pilot CoP.

From the pilot observation, it has reinforced that the researcher should not take an active role but a passive role during the meeting. This is because it was found that as the meeting progressed, members gradually became comfortable and almost ignored the presence of the researcher, allowing the researcher to observe them in action in their normal environment. Also, it has confirmed that observation is necessary to give the researcher a better understanding of how these individuals functioned in a

research-based CoP, to have a sense of its context and to know what questions to ask and follow-up during personal interviews.

As for the three pilot interviews, they were scheduled few days away from each other so that the researcher can transcribe, listen, reflect and assess the outcome, then making necessary modification before the next interview. From the first pilot interview, the researcher found herself lacking in listening during those conversations and not following the participants' lines of thought that did not adhere to the interview protocol. This is because the interview guide was unstructured and the researcher was busy formulating the following questions. Also, the researcher found difficulty to get the participant to focus on the research question as they have deviated to talk about their research in general. However, the data collected are applicable to answer the research question but it is not as rich. Thus, in the second interview, interview guide was modified to be more structured in a flow and questions were refined to be more flexible so that it can be phrased according to the pattern of the communication. This helped to build rapport and trust in the interview. Additionally, storytelling and CIT were used to help participants focus on a story or incident and for emotions, feeling, behaviour, attitude and etc. to surface. This enabled the researcher to gain deeper insights into individual's experience in the research group. Hence, the outcome was more effective in the second pilot interview. Lastly, the third pilot interview has helped to solve problems in terminology used during the interviews as well as the timing and appropriate venue for interviews.

Thus, the pilot study has helped the researcher to refine the data collection plans with respect to both the content of the data and the procedures to be followed. It has also

assisted in developing relevant lines of question and provided some conceptual clarification for the research design. The inquiry for the pilot case was much broader and less focused compared to the actual data collection plan to provide considerable insight into the basic issues being studied. These pilot study data were used in parallel with an ongoing review of relevant literature, so that the final research design was informed both by prevailing theories and by a fresh set of observations.

4.2.5 Sampling

Before the actual data collection, a sample needs to be defined, that is the segment or subset of the population which is selected for investigation (Bryman, 2004). This is important in qualitative research since the goal is to elaborate through rich, dense and contextual data (Henwood and Pidgeon, 1992). Hence, much care is given when designing the sampling so that the chosen cases can provide a detail, close-up or meticulous view of research topic (Williams, 2000). The sampling frame of this research is based on the scope of this study as mentioned in Section 1.7. Thus, only certain cases were chosen because they fit the research question (Bryman, 2004).

In this research, the selection of potential CoPs is based on their suitability to fulfil the three elements of a CoP's structure as defined by Wenger *et al.* (2002a), mentioned in Section 2.3.1, namely, the domain (the area/field of knowledge that defines the research group's set of issues and their activities), community (the individuals that make up the group and their relationships) and practice (their style, actions and activities). Also, these groups need to exist within UK HEIs and they are made up of academics or research staffs who have come together for the purpose of doing research. They are informal and they meet at certain period of time to talk

about and do research. This means that when approaching a potential research group, the researcher will obtain some background information about the research group i.e. is the group informal, who are the members in the group, how many members are there, what the group is about, do they have face-to-face meetings and so on. The sampling approach employed in this research is convenience sampling followed by snowball sampling, an often combination in qualitative research (Bryman, 2004).

4.2.5.1 Convenience and snowball sampling

Convenience sampling is common in inductive and exploratory studies (Yin, 2003). The researcher has used this approach because of the nature of CoPs that is almost invisible in formal organisations and therefore difficult to identify or contact (Bryman and Bell, 2003). Also, convenience sampling is chosen because of the familiarity and accessibility with the particular individual, the CoP and their institution. Hence, apart from fulfilling the criteria stated above, the research-based CoPs were chosen because of its availability and accessibility (Bryman, 2004).

The first CoP was identified through an individual in an institution which the researcher is familiar with. With the individual's introduction, the researcher has managed to get acquainted with one of the members of the research group. Once access is gained, the researcher has then used members of this research group to discover or trace other research-based CoPs, creating a snowball effect leading to adopting snowball sampling. With this approach to sampling, the researcher managed to make initial contact with a small group of people who are relevant to the research topic and then used these to establish contacts with others. This has helped to generate new contacts and widen the search for potential research-based CoPs.

4.2.5.2 Sample size

When deciding on the sample size, researchers need to clarify what they are basically interested in (the phenomena) and at what level of analysis (the in-depth of the investigation) (Easterby-Smith *et al.,* 2002). In this research, the focus is on individual's perception of the values of their membership in research-based CoPs and the research was designed in such a way that thick description can be provided to gain insights of the value members constructed out of the membership. This means that this research is of a qualitative nature and the aim is to generate an in-depth analysis. In such circumstance, issues of representativeness are less important compared to quantitative research (Bryman and Bell, 2003). Thus, sample size is irrelevant in this research and it uses the replication logic suggested by Yin (2003) instead of the sampling logic. The replication logic is deemed practical especially when this research uses a multiple-case design because it focuses on the similarities of each case's results (literal replication) and the differences between them due to expected reasons (theoretical replication). In this way, it allowed the researcher to determine whether the finding is robust and worthy of continued exploration or interpretation.

Therefore, the decision is based on the reflection of the researcher on the number of case replications expected in the study (Yin, 2003). In this research, five research-based groups were targeted and they are made up of thirty individuals in total who are academics, practitioners, research associates and postgraduate students. These groups are from a range of five different disciplines in four universities and three institutions in the north-east of England. From the preliminary inquiry of each group, the researcher believes that these groups are suitable samples as they fit the purpose

of this study and they can provide rich data because they have similar characteristics yet including variation for comparison across settings.

4.3 DATA COLLECTION PROCESS

Much care has been given when planning for the data collection process. This is necessary to ensure the smooth running of the process and the authenticity of the data collected thereby making certain that this is a rigorous and robust research.

4.3.1 Getting a suitable case and accessibility

Once a group has been identified, the researcher sent an email (see Appendix II) to one of the members to make an appointment for a meeting. This email introduces the researcher, the title, purpose and benefit of this research. When meeting this member, it was just a preliminary inquiry or a chat to find out generally about the group in order to check their suitability (as mentioned in Section 4.2.5) for this research. If it is not suitable, the researcher would drop the case and ask the member if other research groups that fit the nature of this research are available. Otherwise, upon confirming its suitability, accessibility was requested to attend one of their meetings to conduct observation and to interview the rest of the members in the research group. Usually, the individual would forward the researcher's email to the rest of the members, asking for agreement. All groups have granted access to personal interview and observation except for one who has refused access for observation because some of the nature and contents of their meetings are private and confidential. In order to overcome this, the researcher has asked for extra time during the interviews to obtain information pertaining to the context of their

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meetings which was agreeable. Once agreement is reached, the list of members'

names and contacts were provided and the details of their next meeting were given.

4.3.2 Conducting the observations

When attending the meeting, the members introduced themselves and the researcher

was introduced. During the meeting, the researcher played a passive role so that the

effect of her presence is minimised. This allowed the researcher to make

observations that are more subtle and natural which might not be obtained through

interviews (as noted in the group where observation is not available). Generally, the

focus is on the action and behaviour of members as well as the non-verbal cues. The

researcher watched what members do, listened to what they said and recorded field

notes to then describe, analyse and interpret the observations as well as formulate

questions which she would like to clarify and follow-up during the interview as

questions were not asked on the spot in order not to be intrusive or disturb the flow

of the discussion.

Additionally, most groups have social sessions or coffee breaks in between or at the

beginning/end of their meetings and these observations were recorded immediately

after the researcher left the meeting. In fact, the role of researcher is less of an

outsider and therefore more likely to get more information and an impression of the

context in which in participants construct their perceived values. However, it is also

unlikely that the researcher will ever become an insider because one needs to develop

meaning through participation over a period of time. Hence, the role the researcher

played is of a spectator and a secretary, taking down minutes of the meetings.

Towards the end of the meetings, the researcher was given some time to talk about

her research to get individuals interested to participate in her research. A piece of paper was then passed around to obtain individuals contact number and information on their affiliations. By giving their particulars, it indicated that the individual is interested and agree to be contacted to further talk about this research. Therefore, this improved the chances of getting an interview appointment.

After each observation session, notes that were taken are organised and properly elaborated immediately. These data were used to formulate interview questions and to further understanding of the research group's context. Also, going through the field notes and taking down the details allowed the researcher to reflect on what happened during the meeting, how individuals behaved, what is the impact of the researcher's presence and how can the next observation session be improved.

4.3.3 Setting up an interview appointment

In order to pursue further, an email (see Appendix III) was sent to each member to set an interview appointment. The email also addressed the ethical issues i.e. informed consent and confidentiality and the process of how data will be collected, so that participants were informed about what is involved throughout the process. When an appointment is set, this implied that individuals have given their consent to participate. Generally, the time and the venue were picked by the participant at their convenience. However, it was also ensured that interview appointments were not too near to each other and this enabled the researcher to reflect, review and make changes if necessary. At the most, only two interviews were conducted in a day. Some of the interviews were conducted at the university the researcher is in but most were conducted at individual's faculty or seminar room at their respective institutions

as long as it is a suitable environment (quiet and peaceful) for interviews to be conducted with minimum disturbance and with concentration.

4.3.4 Getting prepared and gathering background information

Once a date has been set, preparation were made so that interviews are fruitful and of quality. Information gathered from the preliminary inquiry and their affiliations with their institutions were looked at and attempts to get more background information about the participant were made through websites. Additionally, data built from observation were reviewed where questions that needed follow-up are formulated to add on to the interview protocol (see Appendix I). These information provided ideas for questions and helped in the contexts in which the participant live. Apart from that, they not only informed the analysis at later stage but gave more confidence and eased the comfort level of the researcher. Therefore, when preparing for an interview the researcher tried to gather specific information about the participant and the group to gain an understanding of the social and contextual aspect that might bear upon the experiences of the participant the researcher interviews (Dilley, 2000).

4.3.5 Conducting the interviews

Before the interview starts, request was made to put up a 'Do not disturb, interview in progress' sign to minimise unnecessary disturbance and this needs to be permitted by the participant. Also, this helped in making the interview venue more conducive for the interview and for clear recording. This is then followed by getting permission to record the interview as some participants may be put-off by the recording equipment or who became self-conscious or alarmed at the prospect of their words being preserved (Bryman and Bell, 2003). Hence, recording will not take place if

participants are not comfortable or are not agreeable and the researcher will resort to taking notes. However, all participants have agreed to the recording as they were assured of confidentiality and anonymity. Thus, each interview began with a statement of confidentiality with the provision for non-participation or withdrawal from participation at any time. Participants were informed on the purpose of the research by explaining about the title and the aims of the research. Also, the contributions and effects of the research were made explicit to assure them that the ultimate outcome is to promote the interest and well-being of individuals and it will not cause any harm. Hence, individuals were briefed on how data will be used and the researcher assured them that the data will be fairly treated and accurately reported.

Once the context of the interview is set, some broad and general introductory questions were asked on participant's background and status. This is with the intent to begin with questions that are easy to answer, to start a pattern to the conversation, to establish participant's ability to answer, to put the participant at ease and to gain rapport (Dwyer, 1996). This is because deeper questions require participants to be comfortable during the interview, confident of their abilities to answer the questions and clear about how their experiences fit within the study (Dilley, 2000). Then, more specific questions followed i.e. factual and contextual about their community as well as direct and indirect questions are used to prompt, follow-up and probe further to confirm observation data and to help participants make sense of their experience in their research groups. These questions were phrased in various formats i.e. a question, a statement for consideration or comment, a reiteration of other answers the participant have provided to confirm or contradict an answer, to facilitate the

researcher to obtain further details or insights needed to analyse and represent the perceived values of participant's membership.

During the interviews, listening to what was said is important as well as those that were not said i.e. the hesitations, the contradictions, the glorious expositions, the pauses and etc. (Stamberg, 1993). The researcher listened for participants' own observations of how they participated in the various activities of their relationships, with whom they participated and how they spoke of that participation. This means that the researcher is active without being too intrusive. She listened, paid attention, encouraged, observed, asked clarifying questions and concisely reflected on what the participant is feeling or assuming (Reisser and Roper, 1999). This included eye contact, paying attention to body language and active mental consideration both the content and context of what is being said and not being said (Dilley, 2000). In fact, the researcher was attuned and responsive to what the participant was saying and doing. This is important because something like body language may indicate that the participant is becoming uneasy or anxious about a line of questioning. Thus, the researcher needs to be perceptive and sensitive to events so that lines of inquiry can be changed and adapted as one progresses.

Essentially, most questions were open-ended to ensure exploration (Van de Ven and Poole, 1990) and the focus was to assist participants make sense of the values and impacts of CoPs' membership by eliciting stories or incidents of their participation. As the researcher had some understanding of the value of CoPs from past research, she sometimes directed the participants by focussing more on the benefits that are identified. However, participants were allowed to complete their stories before more

insights were gained on each benefit. Also, once a while participants were interrupted when they strayed from the subject and a few specific questions were made to bring participants back to focus.

From time to time as uncertainties arise from the interview i.e. within responses or with observation data, the researcher verified her understanding by summarising what have been said. This was presented as a way of seeking clarification. Also, when a perceived value was identified or when there was a closure of a story or incident, the researcher would recap initial impressions or interpretations to gain confirmation to ascertain the thoughts behind participants' answers. In doing so, it helped to authenticate if the thinking of both parties were in line and it may lead to further elaboration or lead to other stories/incidents.

Overall, each interview lasted between 30 to 60 minutes and the average run length was approximately 45 minutes. Questions were semi-standardised so that a few main questions could be followed up by any related questions of relevance, depending on what the participant answered. Where appropriate, for instance regarding accounts of events, the researcher would summarise and conclusions were checked with the participants and the researcher would answer the participant's questions, if any. Then, the recorded interviews were afterwards transcribed and analysed

4.3.6 Data recording

The interviews were recorded so that the researcher can concentrate on the interview as she needs to be alert to what is being said e.g. following up interesting points made, prompting and probing where necessary, drawing attention to any

inconsistencies in the participant's answers. Thus, it is best to record the interview compared to having to concentrate on getting down notes on what is said. Yet, the researcher took down some important points or notes, just in case the recorder fails. Also, the researcher found that, often when the recorder is switched off, participants have continued to ruminate on the topic of interest and have said more interesting things than in the interview. However, the recorder was not switched on again as it would not be feasible. Instead, the researcher has tried to take some notes while the participant is talking or as soon as possible after the interview because such accounts can be the source of revealing information (Hammersley and Atkinson, 1995).

Furthermore, these recordings are precious as they allowed the researcher to recall her memory of what took place and they are able to capture not only what participants have said but also in the way that they said it thereby making available a complete account of the series of exchanges during the interview (Heritage, 1984). This is necessary for the analysis of data at later stage and it permitted repeated scrutiny of data for a more thorough study (Bryman and Bell, 2003).

4.3.7 Data transcription

After every interview, while the memory is fresh, the recording is transcribed as soon as possible, personally by the researcher because the transcribing process is very time consuming and it can be a daunting task as it needs about four to five hours to transcribe a one-hour interview. This is why it was not left until all interviews are conducted. Also, the researcher can reflect on the interview process and in doing so, the advantage is it makes transcribing and analysis an ongoing activity as it allowed the researcher to be more aware of the emerging themes that she may want to ask

about in a different way in later interviews, thereby improving the following interview. All transcripts are verbatim transcription and when transcribing the data, tone of voice, pause, expressions, disturbance and its environment are all considered and noted. Upon completion, the transcripts are proof-read for its accuracy.

4.3.8 Reflection

From the above, it can be seen that the data collection process is an iterative process involving continuous reflection and analysis. Observation notes were made and interviews were transcribed as soon as possible, while the researcher's memory is fresh to reflect on how these processes were conducted i.e. the environment in which they took place, participants' actions and body language, the tone of voice, the patterns of conversations, how questions were structured and presented, whether participants were given enough time or room to tell their stories, if any points have been missed or has not been picked up and etc. These reflections were kept in a diary. It was noted that the initial observation and interview were not as productive as expected but through reflecting on how or what might be done differently has helped the researcher to continuously develop the data collection process to achieve the research aim (Dwyer, 1996). As the interviews progressed, slight adjustments were made in the questions. The interview protocol was revisited and refined to obtain more insights to crystallise understanding of individual's perceived values of their membership.

In summary, the data collection process as illustrated in Figure 4.1 was conducted over a period of four months. Four observations and thirty interviews were conducted. The data collection process is considered to be productive and fruitful as

much care has been taken when designing this research to ensure rigour and high

standards of research were maintained.
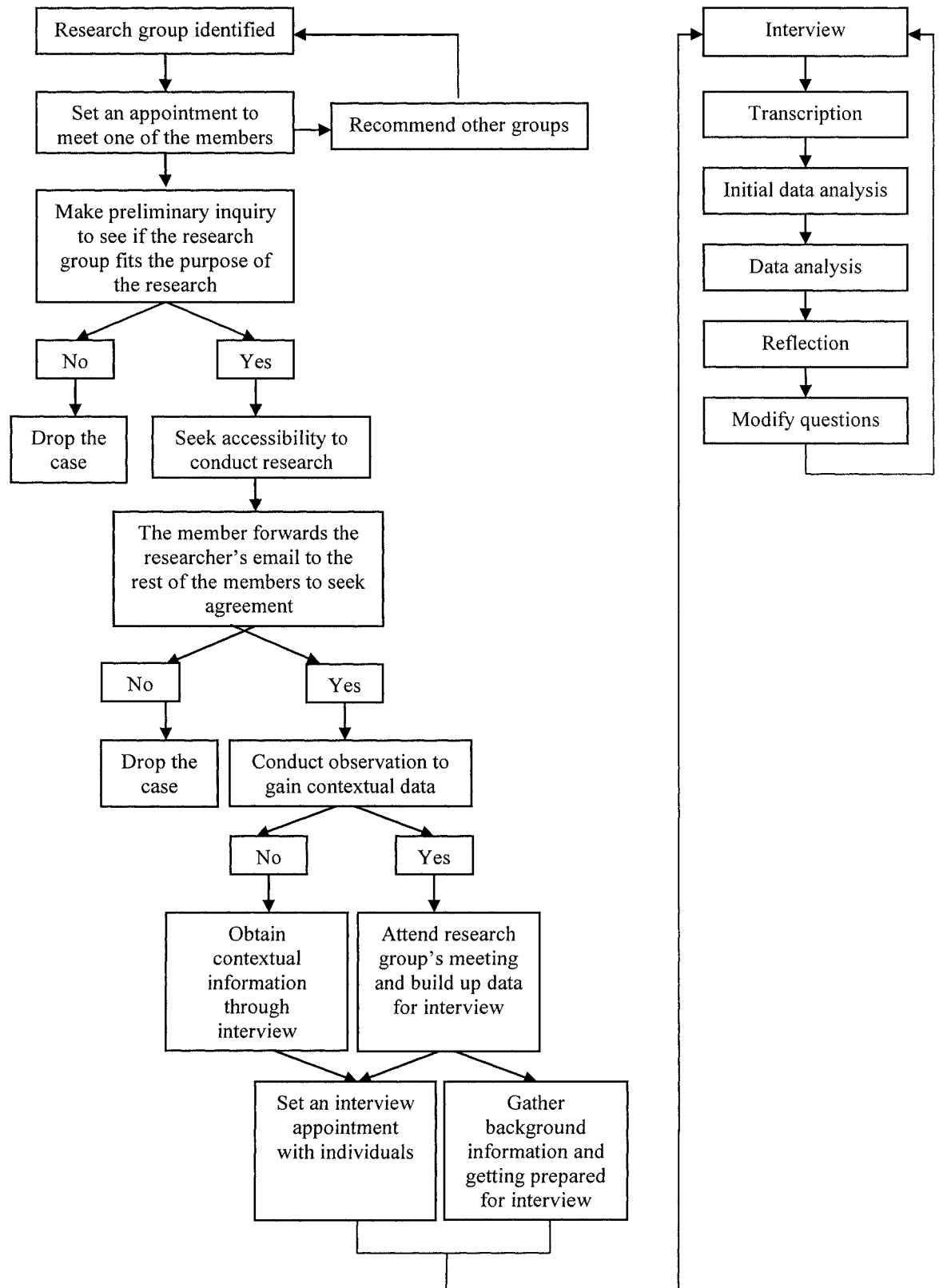
Figure 4.1: Data Collection process

4.4   SOURCES OF DATA

The data collected in this research occur in a variety of forms such as words or narratives and observations. They are from a variety of sources such as verbatim transcripts from interviews, reflective notes from the researcher's diary and field notes or descriptive accounts as a result of watching and listening during observations. Essentially, observation results were used to build up data for interviews and were analysed in conjunction with interview transcripts together with the reflective notes from the research diary. This has helped to guide the unfolding of this research.

In fact, interviews were the main source of data in this study and they have facilitated the researcher to gather data in terms of case stories that provided personal accounts of participant's experiences of joining CoPs, in their own words. Effectively, when narrating, participants are making sense of their past experience and sharing it with the researcher (Cortazzi, 2001). This approach allowed participants to tell their own stories in a reasonable and recursive way (Richmond, 2002) and it provided descriptive knowledge that is understood in context (Bogdan and Biklen, 1982; Stake, 1988). This is because these personal stories comprised narratives in which participants organise their understanding of their experience at a particular time and space, presenting it in compelling enough detail and in sufficient depth so that readers can connect to the experience, know how it is constituted and deepen their understanding of individuals' perceived values of CoPs' membership which it reflects (Seidman, 1988).

Hence, these data sets are of a qualitative nature as they are not numbers (Taylor-Powell and Renner, 2003) and they are more intricate than test scores (LeCompte, 2000). They are narratives consisting of participants' interpretations of their experiences and these narratives encompass extended accounts of their participation in context that developed during the interview. Therefore, they require analysis and interpretation to bring order and understanding of the topic at hand. This is because narratives are representations (Riessman, 1993) and they do not speak for themselves or have unanalysed merit (Riessman, 2004). Essentially, they require creativity, discipline and a systematic approach as there is no one best way of approaching qualitative data (Coffey and Atkinson, 1996; Taylor-Power and Renner, 2003). Thus, subsequent analysis of data that emerged from this fieldwork will produce the fruit of this qualitative inquiry. The following sections will explain and justify the analysis approach employed in this research and illustrate the analysis process conducted to answer the research question.

4.5 DATA ANALYSIS

Transforming data into research results is called analysis (LeCompte, 2000; LeCompte and Preissle, 1993). During the data collection phase and particularly after all the data were collected, the researcher began analysing the data to look for patterns, themes and answers to the research question. The researcher subscribed to Wolcott's (1994) definition of data analysis which described it as procedures followed to identify essential features (the perceived values) and relationships (how it is beneficial to individuals) of data in order to present the data in a useful manner. Thus, the researcher strove to portray the collected data in such a way that they are easy for readers to identify and recognise the perceived values presented.

4.5.1 Narrative analysis (NA)

The purpose of this research is to illuminate and gain insights of individuals' perceived value and impact of CoPs' membership through their reflections about their experience as they participated in research-based CoPs. Therefore, in this research, the approach employed for analysing the data is using the narrative analysis (NA). This is because the main features of NA are the recognition that individuals make sense of their lives according to the narratives available to them and their stories do not exist in a vacuum but are continuously being restructured as they interact in new events and shaped by personal and community narratives (Bell, 2002; Bryman, 2004). Also, this approach takes as its object of investigation the narrative itself (Riesman, 2002) and does not assume objectivity but it benefits the position of the narrator and subjectivity (Bryman, 2004), which is consistent with the standpoint of this research (social constructionism and interpretivism) and in line with the nature of value (as stated in Section 2.4.1 and Section 2.4.3).

Thus, when analysing the data, the researcher paid keen attention to the narratives that constituted participants' stories. In essence, the researcher worked actively to find the voice of the participant in a particular time, place or setting (Connelly and Clandinin, 1990) as well as taking into consideration their actions in that particular situation and trying to grasp its wider social import (Dey, 1993). Effectively, emphasis is paid to what participants said about their experiences, the consequences of their participation and the impact of CoPs' membership in terms of doing research. In this sense, the term 'story' is used to describe what the participant tells and the 'narrative' is the participant's account, covering a variety of understandings and a range of types of text (Pejlert *et al.*, 1999). These narratives gave understanding and

conveyed information to the researcher, to readers and other researcher, helping them to diagnose or to clarify a situation. It also served as an evidence or testimony of participants telling stories of their personal experience in a way of looking at the past and evaluating it (Cortazzi, 2001). This means that as participants plot their stories, they reframe their perceptions and experiences of their participation, thereby making sense of the values and impacts of being a member in the research-based CoPs. Thus, the advantage of NA is it opens up forms of telling about experience and its context and not simply the content to which language refers. Essentially, it is sensitive to the connections in participants' accounts of past, present and future events and states of affairs (Riesman, 2004). More specifically, it asks "why was the story told that way?" (Riesman, 1993) and the focus of attention shifts from 'what actually happened?' to 'how do people make sense of what happened?' (Riessman, 2004).

Hence, the rationale for using NA is that it can be applied to an interview (Marshall and Rossman, 1995) and the analysis of personal narratives can help the researcher to illuminate individuals' perception of the values of CoPs' membership as well as why they are valuable and how these participations have helped them in doing research (Laslett, 1999). Effectively, the narrating process enables participants to share the meaning of their experience, to begin to recount events and reconstruct their experiences through critically reflecting their actions in a CoP setting (Richmond, 2002). In so doing, individuals directly or indirectly give their own interpretations and explanations of those events. They evaluate, in their own terms, their participation, the meaning of events and the wider relevant contexts (Cortazzi, 2001). This gave an insider's view of what the participation in a CoP is 'really' like and by analysing the narratives in their story and the field notes from observations, it gave

insight into the context of a research-based CoP and insight into a lack of understanding of the perceived value of these groupings' membership from individuals' perspective. Also, NA considers the tone of a narrative, the non-verbal gesture and facial expression (Cortazzi, 2001). NA is therefore a useful research tool to complement the methodology of this research.

Since NA takes into consideration personal accounts in respective contexts, it is therefore different in style from the emphasis of coding where it does not result in data fragmentation. On the face of it, NA could consist of a content analysis of the stories that are at hand. However, content analysis is not suitable in this research as it seeks to quantify content of documents and texts in terms of predetermined categories and in a systematic and replicable manner (Bryman, 2004). Also, it is argued that this is very much a positivist standpoint to analysis as this approach is for making inferences by objectively, systematically and making quantitative description of the manifest content of communication (Berelson, 1952; Holsti, 1969). Hence, a simple content analysis will miss many of the contextual complications. Similarly, thematic analysis has been considered and employed at the early stage of the analysis but was not used as the main analytical approach in this research. This is because it involves the open coding of data i.e. the building of a set of themes to describe the phenomenon of interest by putting like with like (Morse and Field, 1995). In doing so, it de-contextualises the data (e.g. cutting and pasting themes together) and may stop at the stage of simple listing of themes (Gordon and Turner 2003). Moreover, as mentioned in Section 2.4.3, perceived value is highly complex and every individual's experience is unique. It is almost impossible to put individual's stories side by side as each has participated in their own ways.

Hence, in order to analyse individual's experiences in its context and taking into consideration their uniqueness, NA is the preferred approach because it begins from the standpoint of the participant and contextualises the sense-making process by focusing on the individual rather than a set of themes. This makes NA more difficult but it is a more rewarding research tool especially in this research because context is not only an issue for the researcher but also for participants. Additionally, it helped to gain unique insights into how individuals interpret their world and added further insights into 'contexts of practice'. Thus, NA is deemed appropriate in this research as it attempts to understand how participants think through events and what they value by closely inspecting how participants talk about events and whose perspectives they draw on to make sense of such events (Riley and Hawe, 2005). However, since not all approaches are perfect, NA has its critics. It is not appropriate for studies of large numbers of nameless or faceless subjects and the process is slow and requires the researcher to be meticulous on subtlety such as the nuances of speech, the organisation of a response, relations between researcher and researched, social and historical contexts (Atkinson, 1997; Atkinson and Silverman, 1997). Hence, NA is not one best approach but in the case of this research it is suitable and useful in bringing the perceived values to the surface that otherwise get lost in the analysis process.

4.5.2 Different narrative analysis (NA) approaches

There are several ways in how past researchers approached narrative analysis. This is because when individuals construct their stories, they create plots from disordered experience (Cronon, 1992) and structure them temporally and spatially as they look back and recount their experience that are located in particular times and places

(Laslett, 1999). In the telling, participants select, organise, connect and evaluate their narratives according to events (Gee, 1991; Michaels, 1981) or sequence and consequences (Cronon, 1992) in terms of how meaningful it is for them. Therefore, there are a great many ways of reading narratives and several typologies exist from past research (Cortazzi, 2001; Labov, 1982; Labov and Waletzky, 1967; Mishler, 1995; Riessman, 2004). Some of the most common approaches used are:

a) thematic approach where the focus in the content of speech i.e. "what" is said more than "how" it is said, the "told" rather than the "telling". In this approach, stories are collected and researchers inductively create conceptual groupings from the data. This is useful for theorising across a number of cases, finding common thematic elements across research participants and the events they describe (Riessman, 2004);

b) structural approach that emphasises the telling; the way a story is told. It focuses on the narrative structure, for example, the abstract of the story; the orientation in terms of time, place, characters and situation; the actions of participants in the event or plot; the participants' reflection on meaning; the outcome of the story; and the afterthought (Riessman, 2004);

c) interactional approach which looks into the dialogic process between the researcher and the participant, where both jointly participate in conversation. The interest is in storytelling seen as a process of co-construction, where the participant and the researcher create meaning collaboratively (Clark and Mishler, 1992); and

d) performative approach that extends the interactional approach. Individuals are seen as performing when telling their stories and researchers analyse different

features such as the positioning of storyteller, audience and characters in each performance (Riessman, 2004).

The typologies above-mentioned are not proposed to be either hierarchical or evaluative. In practice, according to Riessman (2004), different approaches can be combined as they are not mutually exclusive and their boundaries are fuzzy. Therefore, the analysis, interpretation and reporting of findings generated from qualitative and multiple reality research approaches in particular, should not be confined to only one mode of analysis (Hill and McGowan, 1999). Instead, Hill and McGowan suggested that there should be a pot-pourri of analytical possibilities and the choice is determined by the research purpose and the types of narratives in hand. Therefore, since not all stories contain all elements stated above and they can occur in varying consequences as well as research settings, the researcher has adopted the hermeneutic triad formulated by Hernadi (1987) when reading and interpreting the narratives, while keeping in mind the typologies discussed above.

Hernadi suggested three ways of reading a text that are usually present simultaneously and intertwined. The triad begins with the exploration of a text in a reader's vocabulary (what does this text say), continues with various ways of explaining it (why or how does this text say what it does), and ends with explication (what do the researcher think of all this). One of the strengths of Hernadi's suggestions is eradicating the traditional boundaries between interpretation and explanation by pointing out the possibility of reading in different modes at the same time. Hence, the task of analysis, which makes interpretation possible, requires the researcher first to determine how to read and organise the data and use them to

construct an overview of the phenomenon under study and second to tell readers what the overview means (LeCompte, 2000). A series of interpretive considerations and decisions have been made and the following section explains the analysis process undertaken to approach the narratives analytically.

4.5.3 The analysis process

This section seeks to document the analysis process so that readers can see the decisions that were made as to how the analysis was done and how the interpretations were arrived at (Taylor-Powell and Renner, 2003) because analysis and interpretation is related to the uncovering of hidden meaning implied in the literal meaning (Ricoeur, 1974). This means that each narrative is an account of what happened and they do not simply report events but rather give a participant's perspective on their meaning, relevance and importance (Cortazzi, 2001). Therefore, NA can be a powerful research tool if the narratives are accounts of epiphanic moments or significant incidents in participants' experiences, relationships or careers as it allows for interpretations of others' interpretation of their events. Therefore, the study of personal narrative is a type of case-centred research (Mishler, 2000) and this section seeks to provide an account of how the researcher interprets the interpretation of individuals' perceived values of CoPs' membership.

In this research, data analysis occurred both during and at the end of the data collection phase. Since data collection process is a co-construction process, whenever possible, the researcher has sought clarification and confirmation on individuals' perceived values once they are picked up. Then, after data collection, the researcher reflected on the process and data were processed, then read and

analysed to draw out the values in a continuous and iterative manner, cycling between categorising data into themes and patterns, determining how to display the data so that they can be interpreted and be useful for drawing conclusions (Miles and Huberman, 1984) about individuals' perceived values of CoPs' membership. Therefore, the data analysis process has been an immersive activity. In what follows is the analysis process the researcher has pursued to achieve this study's aims.

For this research, analysis began during the interview as the choice of people or events is an analytic decision. As the interviews progressed, the information and understanding gained from the observation notes were helpful for informing the types of questions asked in each phase of interviews. At some point of the interviews, when some clear points on perceived values have been made or when a clear closure of a story is identified, a summary is made by the researcher to verify her interpretation. Then, the data were transcribed and were analysed as they were completed. During transcription, notes were made on which questions were asked to each participant, how the participants answered the questions and whether any initial 'naked eye' connection could be made among the data. However, majority of analysis occurs after completion of transcribing.

Once data were transcribed, they were arranged and labelled into respective files according to research groupings. Copies of data were made and a table of contents for data was created. Then, the purpose of this study is reviewed to help the researcher to focus the analysis. Consequently, transcriptions were listened to and read repeatedly in their totality to immerse into the data and to explore what were said. This helped the researcher to know the data and to write down any impressions

beside the margin when she goes through the data as they may be useful later. At this stage, what was done is based on an initial 'rough' code to develop categories for further in-depth analysis. In addition to employing a simple 'highlighting' of key phrases, emic wording or noteworthy reflection, the researcher began to arrange the data in a very large table according to perceived values that emerged.

However, it came to a point where the tables became too large to manage and it was laborious and time consuming to track or find data. Then word-search capabilities of the word processor were used to find data and other segments that are related to the themes but still a bit cumbersome as it was not as flexible in moving data/themes around even though it has cutting and pasting properties. As the material built up, the task of controlling it became paramount. The choice appeared to resort to analytical software and this led the researcher to use a qualitative software known as Qualitative Solutions in Research (QSR) N6 (also known as NUD*IST) to manage and organise the data (Dey, 1993; Patton, 2002; Richards and Richards, 1994). After much consideration on the strengths and weaknesses of this software, the driver to use this software was to facilitate and support rapid data processing and initial analysis within tight time constraints. Some of the main features of NUD*IST are nodes or themes can be created and moved around easily and sub-categories can be formed under each node which appears like a family tree. Moreover, one can choose to analyse the text according to line, sentence or paragraph; to make a report and memo on the text; to make annotations within the text; to do a text search; to highlight keywords; to obtain statistics information on the text or node; browse the results and download them. All these movement, notation, extraction and 'branching' out of data are within a page and a matter of clicks away which makes it

quicker and more convenient. Therefore, when using N6 for analysis, the researcher found that it is quicker and more flexible to develop or extract themes from the qualitative data that were collected and analysed.

When reading the text, the researcher paid attention to what was said and tried to interpret the underlying perceived value of CoPs' membership compared to list of benefits obtained from past research literature (as in Section 2.5). This initial list provided direction for what to look for and it allowed the perceived value to emerge from the data, thereby increasing the nodes and the formation of sub-categories. Narratives were analysed according to lines and the nodes created were according to individuals' perceived values. Besides, nodes were created to extract information on individuals' and groups' profile as well as activities of each group. When reading the text, perceived values were picked up, keywords and quirky terms were highlighted using the 'InVivo' function and notations were made when reading the text. While creating the nodes, N6 allowed the researcher to write a description describing each perceived value i.e. what it means, what is included or excluded. This was an iterative process and the researcher had to adjust the definition and the description of these perceived value throughout the process. At times, nodes were deleted or created to accommodate values that do not fit the existing labels. Main nodes were broken into sub-categories or smaller more defined categories that allowed for greater discrimination and differentiation. Nodes were added as many as needed to reflect the nuances in the data and to interpret data clearly. This was a useful exercise as it allowed sifting through the data with a more focussed compass allowing the researcher to review the data from a sharper and different perspective as well as forced her to start winnowing away data that deemed "not important".

As a result, the outcomes generated from this process have helped to display data in an effective manner that enabled the researcher to analyse not only what was said but why and how it was said by each individual; compare data between the members of a CoP; compare data between CoPs; and see the connections or differences between the perceived values. In fact, the results can be downloaded and they were displayed in a useful format. On top of each document is the name of the perceived value together with an indication of whether it is a key node or sub-category, its page number, and the date and time it was printed. Additionally, in the document it was marked clearly where the perceived value was extracted from in terms of which file it was extracted from (who said it) and which line it was taken from (where to locate them). Whereas, in terms of taking things out of context, one can use the function of spreading the node by using the function 'jump to this document' to produce the original text to consider the context of the text.

Simultaneously, the researcher has written short notes and memos as diaries to keep track of the steps taken, to retrieve her memory to give accounts of what was done and to record her thinking. This is seen as vital when conducting analysis electronically through mental thinking and clicking away on the computer because the researcher can easily loose track of what was analysed. Therefore, all throughout the process, these notes served as guideposts and anchors to help articulate what was found, where the researcher had been and where she was going. This was immeasurably important in creating the sense of urgency to keep the research moving forward as it has helped to address the issue of traceability in qualitative research and in writing up the analysis process.

So far, all these are done electronically and information can be found without having to wade through transcripts as sources of data. In this research, N6 has been used for the purpose of storage, organising and quick retrieval of information. Taking the advice and feedback of previous N6 users, the researcher has only used the software till this stage because one should not give too much power to technology, but to the person in front of the computer i.e. the researcher. Though computers can do many things, but they cannot think like human beings. Therefore, the thinking is up to researchers and a computer only help to analyse the data, but it cannot analyse the data (Dey, 1993; Patton, 2002; Richards and Richards, 1994). So, there cannot be a sole reliance on the software as a means of analysis but as a complementary tool to organise, explore and understanding data (Atherton and Elsmore, 2004). Hence, further analysis on the explanation (the why and how) and the explication (what it means) were necessary and they were conducted using the conventional method.

These N6 analysis results were downloaded for the purpose of back-up and for the next level of analysis. The data at this point have been organised and became more manageable and focussed as it contained individuals' perceived values expressed in the form of their personal stories and reflections. Data included members' full stories of perceived values with sequence and consequence, their comments directly attributing their participations to values, members' comparison between before and after joining and other relevant data. Those that are not included were data that are not directly linked to the perceived values or to the research question i.e. some mentioned about the downside of CoPs, their research topic, institution's politics and other matters. These data were acknowledged but omitted and not selected for further analysis. This helped to focus on the perceived value and why it is valuable

and how it has helped individuals in their research. Initially, there were thirty-eight perceived values and upon reading the N6 results, they were further reduced and merged or further collapsed to twenty perceived values because as the data were organised and presented in a more effective manner, it became easier to see patterns and connections both within and between the categories. Additionally, the researcher can see what was happening to each participant, across participants or across groups. It also allowed the researcher to compare how each participant answered a particular question while gaining a sense of the overall completeness of the data collection.

In reviewing the data generated through N6, it further served to assist the researcher in winnowing unimportant data away while getting a sharper picture of what was emerging from each participant. Once the researcher has established the perceived values within which the data are organised and has sorted all bits of data into relevant categories, the portrayal of a complex whole phenomenon begins to emerge. This process is analogous to assembling a jigsaw puzzle (LeCompte, 2000; LeCompte and Preissle, 1993). Categories were compared and grouped, mixed and matched until a picture emerge that usefully describe or explain the phenomenon under study (Glaser and Strauss, 1967; Strauss and Corbin, 1990). Therefore, throughout this process, nodes were created or merged and the construction of sub-categories and higher-level analytical categories were considered wile trying to make logical connections. Via this connecting process, it has helped to explain why participants said what they said as the researcher was reading and searching for connections between their participation and the perceived value. This helped to avoid plainly listing the findings without synthesising them and uncovering their underlying meaning.

When interpreting the narratives, structural issues, the conversation between the researcher and the participant, the interactions between members and the actions of participants were considered. More specifically, attention was paid to the event or story structure which tells members' participation; a description which gives background information on time, place, people and context necessary to understand the perceived value in its context; and an evaluation which shows the point of telling the perceived value by presenting the individual's perspective or judgement on the events, marking off individuals' perception of the value of CoPs' membership (Cortazzi, 2001). Significant quotes were summarised, highlighted and organised coherently based on their relationships to reconnect the analysis as a whole for data display and discussion towards drawing conclusions. This is bringing it all together where data were interpreted by attaching meaning and significance to the analysis. In fact, this was a fairly labour-intensive task because it involved reading and re-reading the text and identifying coherent nodes. However, this is the crux of the analysis process as this has helped to analyse results as a whole and to gain a big picture of the study while allowing for exploration of what was said by each participant and meaningful data that emerged via a connecting analysis exercise. Therefore, the findings presented include detailed transcripts of speech so that readers can, to a much greater degree, see the stories apart from the analysis.

In summary, the collected data were processed, then read and analysed in a continuous, iterative manner, trying to determine how to display data so that they can be interpreted and be useful to drawing conclusions about individual's perceived value of CoPs' membership. Effectively, the researcher played the role of a detective looking for patterns that occurred across the various research groups or within

individuals. Data were explored to identify what was said and then explaining why participants have said what they said, trying to explicate what it means. The analysis process was fluid, so there was moving back and forth between these exercises (Taylor-Powell and Renner, 2003) until more evidence was accumulated and connections become clearer. Also, when analysing the data, the researcher had to come to terms with a series of paradoxes. Existing perceived values were used but care was taken to not prejudge the data; data were broken up into bits but also to analyse them as a whole by considering data in context; to divide data into nodes but also to consider how they relate to each other; to be comprehensive but also selective; to analyse singularities but also to analyse across the board; to be rigorous but also creative trying to make sense of the data (Dey, 1993). However, the focus is on the research question and the researcher's role is to interpret the stories in order to analyse the underlying narrative that participants may not be able to give voice to. This way, the researcher variously infiltrates the text to creatively move beyond the data for details to regain the big picture when making conclusions (Ratcliff, 1995a). Indeed, across the board, the discernment of a narrative segment for analysis, the representations and boundaries chosen is strongly influenced by the researcher's evolving understandings, disciplinary preferences and research questions. The next section addresses this issue.

4.6 REFLEXIVITY

This section involves a reflective self-examination of the researcher's own ideas and pre-conceived notions (Higgs, 2001). It is aimed at making the unconscious conscious in order to reveal how the researcher's social location (value, feelings, attitude) affects this research. This is in fact, an analysis of analysis (Bourdieu,

1990). More specifically, the researcher reflected on where is she coming from, what is her philosophical stance, what she wanted in this study, what is her personal frame of reference and what she seeks to achieve and how can she be sure that she is making a quality contribution to knowledge (Higgs, 2001). In doing so, it elaborates on the researcher's experiences as a researcher and this is vital as this is seen as an integral part of the research and need to be revealed and described (Reinharz, 1983). Therefore, this renders visibility to the research process.

This process occurred at the level of methodology, method, data collection or analysis and the researcher acknowledges that the research activity is inevitably shaped by the social constructionism standpoint and inspired by interpretivism, which both favour exploring and understanding individuals from their own perspective as they are the ones interacting with the world, thereby constructing and re-constructing meaning(s) from it. Therefore, when participants participated in this research, the researcher is part of their world because as they interact with the researcher they construct meaning. These meanings were contextual depending on time and space thereby producing multiple realities and the researcher accepts this as she is not looking for an objective truth in this study but it is her aim to interpret and illustrate how participants' narratives relate to the topic of this study. This is why the data collection process is in fact a co-construction process and these thoughts have shaped how the researcher approached it and the types of questions asked.

Given the interactive nature of the research design, the researcher did not share the definition of a CoP or the value theoretical framework with participants. This is to prevent priming or leading participants to use the language of the entering theoretical

framework. Additionally, the researcher has tried to use a language that is comprehensible and relevant to the participants. The researcher listened to the stories, following strands of thought that were certainly not on the list of questions in the interview protocol. When clear patterns or perceived values were identified or even when there was a closure of a story, the researcher summarised at different point to confirm her understanding and interpretation. Also, doubts or discrepancies are clarified at times. Therefore, it can be seen that the power between the researcher and the participants shifted during the interview. The researcher was dependent on the participants in terms of how much they wanted to disclose as they were given the authority in their stories thereby taking control of the interview. Alternatively, the researcher has the research agenda to meet. Hence, it can be seen that both parties have been in charge for different reasons.

When interviewing the researcher hears multiple voices in her mind i.e. her own physical and mental voice and that of the participant. For example, one keeps track of time, another considers how the previous answer is similar to a response from a prior participant and yet a different voice listens to the current answer and notes a discrepancy between this answer and the one just given to a different question or observation. Throughout, the researcher listened to what participants were saying and tried to keep focus on the purpose of the interview as well as making judgements on whether to stray from the interview protocol or stick to it. Also, the researcher tried to remain neutral and not take sides and control her emotions or expression to add effects on participants' stories.

Throughout the data collection process the researcher acted as an outsider as she is aware that she can never be an insider i.e. a member, by just attending one of the research group's meetings. Moreover, she does not share their common interest and she needs to participate over a period of time to become a full legitimate member. Hence, to be effective, the researcher has tried to see the issues by adopting the participants' role and look at the situation from their perspective instead of her own i.e. the researcher thought continuously about what the conversation seems to mean to the participant. At the same time, the researcher is inquisitive but always in a polite and questioning manner. Also, throughout, the researcher examined her own assumptions to develop an open mind whereby all questions can be asked to draw out individuals' perceived values. The importance of this exercise is not to cast herself as a researcher on what is said by participants and not taking an objective view. This allowed the researcher to be non-judgmental and gave an open space and enough time for participants to view their opinions. Essentially, the ulterior motive is to ascertain the thoughts behind participants' answers.

From these multidimensional data that were constructed, the researcher interpreted individuals' perceptions of the values and impacts of CoPs' membership. Clearly this raised the question of whether the researcher can always adopt the subjective position of her participants since the researcher's involvement is inevitable. Therefore, the accounts that were used to construct this study are the outcomes of a joint process of sense making by the researcher and the researched and the process of writing is considered as a constructive process in itself (Weick, 1995).

This means that the outcome of this study is not an analysis of an objectively existing reality about the perceived values of CoPs' membership but attempt to make sense of what is being constructed as a case of perceived value. In recognition of this, these constructed stories are the researcher's, not participants but the analysis is written in a way that privileges the words of participants, accepting all the time that it is dealing with what people say as opposed to what is objectively the case. Hence, reality has to be constructed through the researcher's description or interpretation and her ability to communicate participants' reality.

Clearly such an approach called into question whether this was the actual reality of participants at the time because the researcher interprets the data through the conceptual lens of this research that determines, among other things, which data are noticed, collected and therefore included in analysis. Moreover, every reading is an interpretation and every interpretation is an effort to try tying the text that is interpreted to other texts, other voices, other times and other places (Czarniawska, 2002). However, the researcher has consciously place a number of procedures to prevent, or at least minimise the imposition of the researcher's presuppositions and constructions on the data. It is also ensured that the perceived values pinpointed in the data do, in fact, arise out of the data and were not imposed on them. Therefore, the conclusion of this study is partly the result of the researcher's background, her exposure to the literature on the topic and her accumulated experiences that have compelled the researcher to this thesis topic.

In order to keep track of these reflections, a reflexive journal or a personal diary is kept and it has built up documentation in this study as it provided an account of what

is done and why it was done at all phases in the research process. For example, the researcher reflected upon the values and assumptions of this research, wrote notes and definitions for analytical categories, documented her initial concerns and how these has changed, hunches about the quality of the data gathered and observations about the context of data generation. This has helped to set a paper-trail, providing a means to track the progress of research and stimulating creative thought as well as act as a useful vehicle for increasing the researcher's reflexivity (Lincoln and Guba 1985 in Henwood and Pidgeon, 1992).

In summary, the researcher has been thinking on her feet all the time and throughout the process she has became more reflexive in this study, acknowledging the inseparableness of the researcher and the process of inquiry. Indeed, the researcher and the researched are characterised as interdependent in the social process of this research. Individuals have been viewed as participants and not as subjects, and this is considered as a technique of collaborative engagement. Thus, the researcher has not underestimated her involvement in this research and she recognised her involvement in the research process. This has helped to avoid losing opportunities for gathering valuable insights from participants and alerted the researcher to probe beneath the surface of what was being said and done, and in analysing and presenting the data. Overall, the researcher believed that she has achieved the aims of this research and it is observed that participants were interested and excited to talk about it. They mentioned that it has been pleasurable because it helped them in sense-making and they found it a useful and good session. Additionally, the researcher has made every effort to produce an analysis of the highest quality and this is discussed in the following section.

4.7 AUTHENTICITY OF DATA

As in all research, consideration must be given to construct validity and reliability (Taylor-Powell and Renner, 2003; Yin 1994). However, demonstrating the validity of data gathering methods and the reliability of analysis is always challenging for qualitative studies (Denzin and Lincoln, 1998; Mason, 1998). The choice of these procedures are governed and shaped by the lens the researcher uses and her paradigm assumptions or worldviews (Guba and Lincoln 1994).

The standpoint this research adopts assumes pluralistic, interpretive, open-ended and contextualised (e.g. sensitive to place and situation) perspectives toward reality (as mentioned in Section 3.2.3 and Section 3.3). Hence, it can be seen that the authenticity procedures reflected in this standpoint present criteria that are different from the quantitative approach. Lincoln and Guba (1985) use the terms credibility, dependability, confirmability and transferability to impose these standards on qualitative research to explain rigour that is comparable to quantitative research. This section deals with each aspect of these standards of research in turn.

4.7.1 Credibility

Credibility is about how believable are the results of this research and how they are justified (Norris, 1997). More specifically, it is how accurately the findings of this research represent individual's perception of the values and impacts of CoPs' membership (Schwandt, 1997). In this study, a variety of techniques were employed to ensure credibility of data and data analysis. At the outset, preliminary inquiry was made to establish that each research group is an eligible and instrumental case (Stake, 1995) to provide insights into the perceived values of research groups' membership.

In addition, participants' credibility to speak on their experience is considered. Overall, the choice of these procedures is governed by the social constructionist viewpoint and the assumptions of the interpretivist paradigm.

One of the ways to maintain credibility is through the lens of the researcher who participates in or reads and reviews the study (Creswell and Miller, 2000). In this research, the researcher believed that the researched world cannot be reproduced but has to be represented in the form of narrative analysis and this depends mainly on the researcher's views on the construction of knowledge i.e. interpretations of data are related to the lived experience of participants (Riessman, 2004). Therefore, an analysis of these data cannot reveal what participants 'really' think or felt (Pejlert *et al.*, 1999) because it is at that particular point of time and space when interacting with the researcher, participants bring together their narratives to form stories about their experience with the researcher interpreting their interpretations. In this regard, the researcher acknowledges that interviews are not precise, definite, objective, clear, predictable, measurable or repeatable (Beer, 1997). It is seen as an artistic composition and a co-construction process, and that reality is not static.

Hence, it has to be accepted that participants' constructions at that particular time may not represent 'truth' or reality but it is an attempt to relate as they lived their experience (Murray, 1986) and they are in shifting connections they forge among past, present and future (Riessman, 2004). In resonance of the standpoint of this research, it is assumed that the world as perceived by participants is no more and no less than the world as it is the appearance of things that is the focus of attention rather than the objective reality because the perceived world is essentially a

construction of the mind (Rock, 1975). In this regard, the accuracy of text is not an issue because truth of a story does not lie in the facts but in the meaning and the social construction impact of whether others believe the story (Gabriel, 1998). The point is, this research is not trying to find the 'truth' (Chell, 1998) but it is concern to collect and explore the variety of accounts participants construct (Kitzinger, 1987) by zooming in their subjective experience (Stainton Rogers, 1995) and to understand their perceived values and impact of being a member in these research groups.

However, in interpreting and telling participants' stories, the researcher has tried to ensure that they are not just stories but they are defensible and well-grounded conceptually and empirically. Otherwise, they do not make sense and cannot be credible. The researcher established credibility through constantly scrutinising the data and their interpretation. For example, interpretations and queries on the observation data are confirmed and clarified during interviews. These data are also used to corroborate with what is said during the interview. Questions were asked in different ways and responses were checked on what was said within their stories and between different members. When discrepancies arose, further questions were asked to probe further to clarify. This helps to substantiate the trustworthiness and credibility of the data (Ho, Ho and Ng, 2006) and the researcher can be more confident in the credibility of the findings.

Furthermore, it is acknowledged that as each narrative unfolds, it is contextualised by the purpose of this research. Therefore, data and its interpretations were reviewed and reflected in an iterative manner, paying attention to its consistencies and coherences as well as what they are saying and why it is told. Findings within each

participant or each group as well as between other groups are investigated and they are compared to the literature framework (Murray 1986). This helps to establish rigour in representing individual's multiple constructions adequately. To further enhance the study's trustworthiness, when presenting findings, the researcher directly quoted data gathered during the course of this study. This is because the story would not be believed without the context of the experience. Therefore, whenever possible, in the findings chapter that follows, the researcher described the settings, the participants and the themes in rich detail to create verisimilitude so that readers felt the experience or the events described in this study (Denzin, 1989). With this vivid detail, it facilitates readers to understand participants' accounts and it serves as a guide to credibility (Creswell and Miller, 2000; Rubin and Rubin, 1995).

Another lens, the researcher used to ascertain credibility is using a critical friend, someone who is external and independent, not affiliated to this study (Ratcliff, 1995b). Since, reality is not static and is time and space dependent, data were not returned to participants. Instead, someone neutral is involved to establish if interpretations accurately represented participants' constructions.

In summary, the researcher wishes to highlight that the accounts of participants' meanings are never a matter of direct access but are always constructed by the researcher on the basis of the participants' accounts and other evidence (Maxwell 1992). This is because the social world of participants are constructed and reproduced through their continuing activities which they are constantly involved in interpreting (Blaikie, 1993) and this is in line with the assumptions of the standpoint of this research. However, every effort is made to produce an analysis of the highest

quality so that the findings can provide insights into the perceived value of these research groups' membership.

4.7.2 Dependability

Generally defined, reliability refers to the consistency of research results (Guba and Lincoln, 1989; Sykes, 1990) and it is the degree to which the finding is independent of unexpected situations of the research (Kirk and Miller, 1986). Dependability in interpretive research is often accomplished using an audit trail (Lincoln and Guba, 1985) in which the researcher maintains a log containing personal notes, which allow for reflection upon what happens in relationship to personal values or perceptions in the course of carrying out the research and analysing the data. The logbook for this study was in the form of a personal diary that was used to record all observations, interactions, thoughts and discussions that were carried out throughout this research. It also included how decisions were made, what focus was taken, the creation and the revisions of categories' labels made during the analysis and observations noted during the interpretations of data to help readers follow the reasoning of the researcher (Taylor-Powell and Renner, 2003). In doing so, it gave the research transparency and provided clear documentation of all research decisions and activities for audit trail at different stages of the research (Creswell and Miller, 2000). Readers are able to see clearly the basic processes of data collection and analysis.

Apart from that, it also offers evidence for the effective use of the methods employed in this study for future researchers. In this research, data are collected from various sources and they are divergent and not replicable. This does not imply a lack of reliability but lack of uniformity in the pattern of behaviour observed inherent in the

subjectivity of individual's experiences (Ho *et al.*, 2006). Therefore, when employing the methods for data collection, reliability checks are built-in to ensure consistency and trustworthiness of the data obtained. This is done through following-up checking of the data collected from observations, interviews and the literature. Also, questioning, clarification and summarising are carried out to verify the credibility of data. The interview protocol is flexible and allows the researcher to ask similar questions in different ways depending on the interview context and the participant. Questions are prepared in a way to jog participants' memories and enough time is given to recall events that are important to them. Moreover, the multiple-case design permits independent corroboration within individual cases or between cases. This corroboration helped the researcher to see patterns more easily and to eliminate chance associations (Eisenhardt, 1991) so that the stability of findings may be justified and reflect the usefulness and trustworthiness of the methodology (Miles and Huberman, 1994).

Dependability was further enhanced in this study as the researcher alone carried out, transcribed and analysed all of the interviews but it needs to be highlighted that they are conducted in ways that are dependent on the interview context and the participant. However, interviews do not differ to any considerable extent with regard to length, probing and focus. Therefore, in the world of a social constructionist, replication itself is problematic (Marshall and Rossman, 1995).

4.7.3 Confirmability

Confirmability is obtaining of repeated evidence through participation and observation (Leininger, 1994). Objectivist assumes that objectivity exists if suitable

methods are employed and an adequate distance is maintained between the researcher and the researched (Lincoln and Guba, 1985). However, as mentioned above in Section 4.7.1, there is not something objective or unchanging out there. The findings of this research is grounded in the world that is ephemeral and changing, noted in the standpoint charged on this research, that is every interaction between the researcher and the researched is a co-construction based on space and time. This is exemplified by Ratcliff (1995b) that a person never crosses the same river twice because it is never the exact same water, the banks of the river are never exactly the same because of erosion and etc. This implies that reality is dynamic; it changes constantly and every participation or observation is an experience that is unique at a particular time and context.

Therefore, due to the subjective nature of individuals' perceptions or constructions, confirmability is no more an issue of objectivity in this research and this shifts the emphasis from the researcher to the data itself, taking into consideration the effects of the opinion and the involvement of the researcher in the process (Lincoln and Guba, 1985) since it is impossible take the perspective of the researcher out of what is observed (Rubin and Rubin, 1995). In this case, the interpretations of the researcher are essential to the study as are the interactions of the researcher and the researched in creating a useful and compelling study. Hence, the issue of the researcher and the researched is addressed by keeping a reflexive journal (as mentioned in Section 4.6), keeping an account of the topic and the sense-making process as the researcher interacts in the research process (Altheide and Johnson, 1994). This helps to minimise the researcher's prejudices and provides a trail for the researcher's reflection and external audit.

4.7.4 Transferability

Transferability is the degree to which the particular findings of this study can be transferred to another person or to another similar context or at other times but still preserve the particularised meanings and interpretations (Leininger, 1994). This is always a problem in qualitative research (Merriam, 1998) especially in interpretivist research as it maintains that every instance of human interaction represents a part of individual's life-world (Denzin, 1983), carrying layered meanings which come in multiples (Williams, 2000). Therefore, the life-world cannot be determined as it leads to too much variability to allow the possibility of generalisation from a specific situation to others. This is because the phenomena under study are not free from its time and context.

As for this research, there is no exception and it is not the aim of this research to generalise the knowledge about individuals' perceived values of CoPs' membership but it is interested if there are any particular commonalities these research groups share which signify other or potential research-based CoPs. By employing the multiple-case design, this research gives pictures of different contexts (Yin, 1994) and offers insights for other situation (Donmoyer, 1990) but the results cannot be transferred directly from one context to another (Lincoln and Guba, 1985) nor generalised across many contexts. This is because the data generated are made up of detailed stories of experience that are personal and not generalised descriptions. However, the researcher has attempted to provide a detailed enough description of the research case to paint a picture of its members, activities and the HE environment. This is to enable other researchers or readers to identify patterns of the case that they can transfer to other research-based CoPs cases with which they are familiar with

(Firestone, 1993), making comments or decisions about the applicability of the results to other settings or similar contexts (Creswell and Miller, 2000; Geertz, 1979).

This means that thick and rich descriptions add to the transferability of the findings (Sinden, Hoy and Sweetland, 2004) and enable readers to look for patterns in the findings that explain their own experiences and assist them in making informed decisions for future action. Therefore, this suggests that this research cannot make an across the board generalisation but it can generalise to a certain extent in which Stake (1995) called small-scale generalisation and Williams (2000) termed it moderatum generalisation where readers can understand or know something of the context within which this research reside in and is then able to make their own generalisation about that context.

In summary, the researcher considers the findings of this research as a set of working possibilities for readers to make sense of similar persons or situations (Maxwell, 1992). This research can confirm the perceived values and impacts of research-based CoPs but cannot conclude that they are the same elsewhere. The aim is not to generalise across a population but to provide understanding from participants' perspectives, focussing on individual's own or unique experience.

4.8   ETHICAL CONSIDERATIONS

Ethics refers to the appropriateness of the researcher's behaviour in relation to the rights of participants of the research or how they are affected by it (Saunders, Lewis and Thornhill, 2003). Due to the nature of this research, it involved human beings and therefore, extreme care has been taken to avoid any harm to them. Thus, in

carrying out this research, concerns were given to ethical considerations that will or may potentially arise throughout the investigation. The conduct of this research was guided by the code of ethics of Northumbria University. Having identified any ethical issues, strategies were instigated to mitigate or eliminate them. Ethical concerns have revolved around the topics of informed consent, right to privacy, protection from harm and deception.

Informed consent means that prospective research participants should be given as much information as might be needed to make an informed decision about whether or not they wish to participate in a study (Bryman, 2004). This has been achieved via sending a formal email to potential participants and it contained a description of the research, its purpose and what is involved. In addition, the consequences of participating i.e. the possible outcomes, contributions and effects of the research were made explicit to the participant to assure them that the ultimate outcome is to promote their interest and well-being and it will not cause any harm (see Appendix III). It was only after receiving a positive replied response to the invitation to participate did any further activity progress. Moreover, prior to the beginning of each interview, the requirement for tape recording the interview was explained, the focus of the research topic was reinstated and it has been brought to the attention of the participants that their participation is voluntary and that they are free to withdraw at any time as there will not be coercion or inducement to participate. No participant declined to continue.

Another ethical concern is the right to privacy which refers to protecting the identity of the participant. This issue is particularly pertinent because of the potential

freedom within the interaction for exchanging information and interpretations (Easterby-Smith *et al.*, 2002). Participants were assured that their rights are respected and it was highlighted that they have the right to choose not to answer any question or provide any related data where requested. Also, confidentiality has been assured as the primary safeguard against unwanted exposure of the participant. All personal data have been secured or concealed and made public only behind a shield of anonymity. Pseudonyms are used when reporting the findings. At the beginning of each interview, the researcher has assured the participant that any information revealed will be treated strictly confidentially. It is also assured that information will not be used for discussions with other groups, organisation or other related parties. Participants were informed on how data will be used, who will have access to the data collected, how the results of the research will be disseminated, what will happen to the data collected after the research is completed and where data are to be preserved to safeguard future anonymity and confidentiality of participants. In fact, data collected were carefully indexed and locked away for safe keeping.

As for the use of these qualitative data, the researcher has far more control about what information is gathered, how it is recorded and how it is interpreted, thereby giving the researcher a considerably more powerful position in relation to participants (Easterby-Smith *et al.*, 2002). Hence, care has been taken when collecting data and it is ensured that they have been accurately and fully collected to avoid exercising subjective selectivity in what was recorded. Furthermore, when reporting of results, a critical friend was used (as mentioned in 4.7.1) to ensure that the data have been fairly treated and accurately reported, avoiding any misrepresentation and misinterpretation. In summary, it is to the researcher's best

knowledge that all ethical concerns have been addressed throughout the period of this research and the researcher has remained sensitive to the needs of the participants and to the impact the research has on those who have provided access and co-operation.

Overall, this chapter has looked into the methodology and the methods of this research, its data collection and the analysis process as well as its authenticity and ethical issues. Implementing these has helped the researcher to explore in depth and to surface knowledge of the perceived values and impacts individuals construct by participating in these research groups. The findings of this research have been separated into two chapters. Chapter 5 addresses the analysis and findings and Chapter 6 will discuss these findings in relation to past research and also highlight its main features.

CHAPTER 5

ANALYSIS & FINDINGS

5.1   INTRODUCTION

This chapter analyses and presents the study's findings. It begins by giving details of

data sets and in order to set the scene, this chapter introduces the research context prior

to presenting the research's key findings. Basically, it will describe the research settings

and give an account of the groups' profile, their purpose and their activities followed by

each of its member's profile. Then, the rest of the chapter describes the study findings

that emerged from the data analysis, in detail. The findings reveal that individuals

perceived their CoP membership to be valuable as it has helped and supported them in

terms of doing research and have impacted them personally and professionally. Twenty

values are presented and each is supported with direct evidence from the data. The

synthesis of these results will be further discussed in the next chapter.

5.2   DATA SETS

The purpose of this research is to gain insights into individual's perceived value and

impact of CoPs' membership. Three data sets were available and these consisted of

individual interviews, observation and notes (observation, interview and personal

reflection) from the researcher's diary. In terms of observation, of the five research-

based groups targeted, only one has refused access for the reasons of private and

confidentiality of their discussion that includes work and personal lives. Nevertheless,

information about the group and its context has been supplemented by additional interview questions. In fact, this rejection has enabled the researcher to make a comparison and has proven that conducting these observations have indeed assisted in gaining a richer sense of the group's context i.e. who attended the meetings, how it operated and the dynamics of the meeting.

In addition to observations, data from interviews with thirty members of the five groups are considered, which forms the research's primary data source. The interviews were conducted over a period of four months and this data set consists of over 15 hours of interviews or tape recordings. Tapes were transcribed and converted to line-numbered transcripts which have yielded more than 105,000 words of verbatim transcriptions. The general purpose of conducting these interviews was to gather data about the research-based CoP itself i.e. learn about its history, uncover its typical activities, find out their communication methods and patterns they used and have members identify and explain the ways that membership have been valuable to them in terms of doing research as well as how it has impact them personally and professionally. Therefore, the data collected covers both process and the reflective accounts by individuals explaining the values of CoPs' membership. Additionally, it has allowed the researcher to gather as much information as possible about relevant contextual issues and CoP members' impressions of the community. Effectively, these qualitative data were used to interpret the findings

5.3   RESEARCH CONTEXT

The purpose of this section is to provide an overview of this study's research setting and to introduce the groups and its participants. In exploring individual's perceived value of

CoPs' membership, it is important to have understanding of how the context and individual's personal background have influenced what they have narrated in their stories. Therefore, when the researcher interviewed the CoP members, she first asked some factual and contextual question (detailed in the interview guide as exhibited in Appendix I) to obtain information and details about the group, the individual, the structure and the process of the particular research-based group. Then follow-up questions were asked to help explicate why members participated and what motivated them to join. The researcher felt that these questions were an important step to give insights into the group's and individual's profile. This background information is useful to offer a picture of their activities and the context in which these groups and individuals operate. Effectively, it sets things in context and gives understanding of the origin and the settings of the CoP in question.

Therefore, the following sections look into the profiles of each group and its members, including general information about their backgrounds, areas of expertise and how they interact within the context of each group. These data were obtained from observation as well as interview. However, it needs to be highlighted that throughout this study, when presenting the findings, in cases where the names of individuals or institutions are mentioned, pseudonyms are used as the researcher has undertaken to maintain the anonymity of individuals and institutions involved in this research. Hence, the researcher has masked the names using fictitious names, has covered the location of the communities and has edited individuals' affiliations to remove any references that might serve to identify a particular participant or institution. In effect, when a participant referred to their own experience or their own institution's experience, care was given to

remove identifying names or labels that might cause a participant to be recognised. Nevertheless, in cases where a participant referred to an organisation not their own, or to people or institutions considered public, these were generally included to provide context, for example, when participants referred to a published study, the role of a particular research funding body, leading authors or other well-known entities without which the embedded theme would be lost.

5.3.1 Research-Based CoP profiles

Five different research-based groups participated in this study, consisting of thirty individuals at four universities and three institutions in the north-east of England. These groups were selected as research cases because the preliminary inquiry revealed that they exhibited features of Wenger's CoP structure (as mentioned in Section 2.3.1) and their three fundamental elements (domain, community and practice) fit within the definitions (as mentioned in Section 4.2.5) of research-based CoPs in the context of this research. Additionally, they demonstrate features that are similar to other CoPs in corporate organisations in past literature (Wenger, 1998b) and they meet regularly to engage in activities of enquiry and to do research. This has allowed the researcher to label them as research-based CoPs with confidence as they resemble the examples given in the CoP literature. The following introduces each group, giving details of the context in which its members have constructed their stories. In doing so, the groups will be introduced in-depth and these profiles will discuss the structure of the group: its domain (the purpose or area of interest), community (who are the members and their relationships) and practice (what are their activities); and describe their type and characteristics in terms of their size, disciplines, boundaries, where they meet and how

often they meet. These profiles were compiled based on the data obtained mostly from observations and also interviews.

5.3.1.1 ClinPrac Group

The group consists of five people and all five were interviewed. They have existed for more than four years and all members were with the group since the beginning. It is made up of two academics from one university and three practitioners from three different clinical practice institutions. Therefore, this is a group that stretches across four institutions and it is a multi-disciplinary group consisting of physiotherapist and occupational therapist. They have known each other personally through their Masters studies as students and supervisors and later linked up to form this research group. This group was originally around practitioners but with the fact that research in the allied health services is struggling, they have asked for the support of the academics. It has become incredibly difficult for the practitioners because no one has dedicated time to do research and they have gained help from the university because they believed that a lot of research is in the academic world. Therefore, they have a joint venture but they made it very clear that the emphasis is on allied health services and not the university because the university did not have problem doing research but the allied health services did. They found that it is no point shifting the bulk back to the university. So, they thought it would be better for the university to come join the allied health services rather than the allied health services join the university.

Therefore, their common interest is in developing research capacity in allied health services and looking into how clinicians learn to work with service users to change

practice. The feeling of responsibility for research capacity development and improvement in allied health services have led members from the university to team up with practitioners from the clinical practice to help fulfil that role. Besides, it is their aim to write these interests for publication and the process that they are going through. Members try to understand the enormous pressure of being involved in research especially when one is a busy clinician and how one articulates their research questions to gain funding support. On top of these, the practitioners are also involved in a physiotherapy course at the university in terms of supervision. They were trying to link in the practice to relevant question of student's project and they would have an academic supervisor from the university and a clinical supervisor from practice. This has enabled them to attach their research endeavour and their research growth to a student's project.

This group usually meet once every three months at one of the clinical practice institutions for less than two hours. It was observed that during meetings, they work towards a proposal to get research funding to address the agenda in clinical practice and writing up a paper for publication on their research journey. They discuss about ways of doing research, about different methodologies and try to come up with a model for their research journey. They divided and delegated tasks based on things individuals were doing by choosing the most appropriate person for that. Each member will look at section(s) of the paper and work on a different area and they would bring their contributions to the beginning of the meeting and then work on it. Besides discussing about research, they also discuss about issues in their workplace, politics in their field and the research environment, their personal matters and etc. There was no formal leader, no formal secretary and no requirements of minutes or auditing. Somebody kept

notes and will circulate them through email for the benefit of the group members. Out of these meetings they communicate through emails and telephone.

5.3.1.2 BizMan Group

This group existed more than a year ago comprising about six core members. Only four were interviewed. Of the four, three are academics and one is a research associate from two different divisions in the business and management field at a university. Therefore, this group is within a School at a university but cutting across different divisions. All members have joined the group since the beginning and their main interest is in individual and organisational learning, emulating the CoP process, exploring knowledge management and developing research. This group started with one of its members sending out an email to a selected number of people, which she has had conversations with. She began to realise that the types of work they were doing have some commonality yet they did not get an opportunity to talk about it. Moreover, with an emerging drive from the School to become more research active, she has decided that it would be beneficial to form a research-based CoP and she therefore sent out an invitation for individuals to join.

The group meets once in 2-3 months and since they are considered to be quite new, it was observed that their activities revolved around defining their focus and the purpose of the group. They kept re-visiting the content of their meeting, how they were managing themselves, what they were getting out of the meetings and how it energises them. Besides, they talked about their research interest and their general area of concern. Also, they were seen sharing their research and teaching experiences as well as exchanging

resources by passing relevant literatures to members since they know what each other's research is about. Other activities include talking about their research ideas, giving feedback to each other, how to take their ideas into publications and passing information about conferences and call for papers. It was also noticed that members showed concern for each other and asked about each other's progress. Also, they talked about personal matters such as, about their family, how their work and research have been, what are their future plans, office politics and etc. There were no formal leaders in the group but somebody will take down notes and circulate it. Apart from these meetings, they communicate as well as circulate useful and relevant references and papers on a particular topic, through emails.

5.3.1.3 EngLit Group

This group started two years ago and is an Arts and Social Sciences forum made up of members from four local universities. They have a mailing list which consists of about twenty five members but not all attend the meeting at one time. Usually there are about fourteen to sixteen members per meeting and the researcher interviewed nine of its members. This group is made up of academics (full-time and part-time) and postgraduate (PG) students. Of the nine members interviewed, seven are academics and two are PG students. They have come together because of their interest in the 17th and 18th century English literature and to the extent romantic literature which is in the period the forum covers. Since very few people talk about the entire length of the English literature, they have specialist areas. In this group, it consists of specialist in literature, culture, architecture, romantics, childhood, politics, critical theory and etc. Therefore,

this collaborative research group cuts across four universities' boundaries, it is inter-disciplinary and with people from different levels of knowledge.

These individuals have come together because it is hard to get a critical mass of students in one university as the 18th century is a less popular period compared to others. This is because this period of research is of minority interest compared to the modern literature. The academics believed that if they felt isolated working in the theory, the PG students would feel the same as well because there is only more than one or two PG student working on the topic in any department. Hence, the practical reason for their existence is to combine students and to bring together a critical mass apart from research and community reason. It is really geared towards two purposes: to provide a platform for PG students working in the 18th century studies, to facilitate contacts with academics from other universities and also with PG students who are working on related fields in universities other than their own. It is more of a help group for research students than it is for research academics as it is students oriented with minimal academic involvement. Supposedly, academics are not collaborating at a professional academic level with colleagues with a view towards a specific research outcome but more of an informal gathering to help research students gain experience in giving papers before informal audiences. The idea was to have a forum with mainly student led and that does not exclusively forbid publication and so on but it rules out from that being a priority.

They have meetings twice a semester at any one of the universities and often on a Friday as it was people's research day. Usually before the meetings, they would send an email to say if anybody wants to give a paper. Once the offer is taken, an email will be sent to

inform others on when it is going on, where it is going to be and what the paper is going to be. In this way, members will know somebody is going to talk about a specific topic. It was observed that during the meeting, members hear presentations of papers given on academic subjects of interest by PG students or academics. For example, it could be a conference paper that is going to be presented or have been presented, somebody's PhD study, someone's research idea or proposal or even just an article for debating. At times, there are some visiting lecturers giving papers.

At each meeting, there is usually two sessions. They begin by going round the table to introduce themselves and half of each session is given to someone who brings along a passage or a poem on the whole which people are unlikely to know, presenting it and discussing it. Members were seen to be engrossed with the paper, excited about it, debating and giving feedback about the topic. After the first 'formal' session which is for less than an hour, they go for a coffee break for some conversations and maybe for following up something that someone said during the session or just a chance to relax and socialise or to discuss where to go for a drink afterwards. After the coffee break which is for about fifteen minutes, the second session (also about half an hour) continues and finish off with going out for a drink. Overall, members were aware of the time limit and they were cooperative. It is noticed that there is a high level of social interaction among members during the coffee break and the drink afterwards. During these informal sessions, they generally asked about one another's families, pets, hobbies or recent adventures. Some even come early to join the session to chat. They discussed places they could all go eat together that night that would be conducive to talking and

maybe even playing games. After the meetings, the 'minutes' get passed round and the synopsis of each meeting goes round to all the members.

5.3.1.4 EngHis Group

The group consists of four academics in the Arts and Social Sciences discipline and have existed since 1999. The members are from two different divisions within the same School at a university. Their broad interest is in English and History with people specialising in American modernism, European modernism, Media and History of Arts and Design. Regardless of their background, this group shares an interest and general level of expertise in the feminist approach of doing research. They work on aspects of feminism and looked at the way women are represented in literatures. Therefore, there are inter-disciplinary, there is no direct similarity on the areas of their research but it is the common approach that is feminism in their respective area of interest that draws them together. Each member will bring her singular and unique perspective to the table and they come from a position where they are looking at materials from the feminist point of view.

Initially, they were just friends who started to go out to evenings together occasionally to talk about their research. They talked about the ways in which they could come together and do a joint project together. This has led to the idea of organising a small conference and they started to have more focus in their meetings. The conference theme was around their common interest and it has resulted into an offer from an international journal for a special edition publication. Thereafter, their meetings were about editing and compiling this journal publication. Usually, they meet once every three months.

Three of the members were with the group since the beginning but one is a new staff, newly joined the university more than three years ago. At times, they would meet in the evenings for a meal or they go out to somebody's house or someone hold a party or something like that. Otherwise, they meet at any one of their faculty rooms to talk about research and work matters. They talk about ideas, compare what they were working on, what stage they are at, what sort of things they hope to achieve and how they can kind of assist each other to achieve those things. When they socialise they also end up talking about work and office politics. Besides, on a personal level, they enquire about one another's weekend adventures, catch up on their kids' latest accomplishments or encourage one another if they are having a hard week. Therefore, due to its informality and its private and confidentiality, this group has not granted access to the researcher in terms of observation and these data are obtained through extra interview questions and prolong interviews.

5.3.1.5 InfoCom Group

This group is in the Computing discipline and it has come together due to some restructuring in the university. More than a year ago different schools have been merged together and small research groups are pressured to come together. Therefore, an open invitation was made and this resulted to an amalgamation of three divisions and a number of research groups. They gave themselves a new banner to cover the related areas of research i.e. the business information, computing and the information studies. Now, this group has five core members and more than fifteen peripheral members. The researcher has interviewed all the core members and three peripheral members. These eight members were made up of academics, practitioners and contract researchers. It is

an inter-disciplinary group consisting of members specialising in the areas of information systems, information storage and retrieval, information science, image data, information management, information and communication management, computer science and information planning.

The aim of the group is to come together to do research, to generate research funds and to establish themselves as a research centre in the near future. They meet once a fortnight for about an hour. At this initial stage, their meetings has been on understanding the severity of differences in diverse research areas and the building of relationships between individuals. The meetings are also to keep each other aware of current research grant, funding opportunities and to put joint bids together. Besides, the meetings are also about creating a strategy document to propose to the university to establish the group as a research centre. It is observed that the format of their meetings is a bit loose and they meet on a specific day and time blocked for the meeting. The first fifteen minutes is usually used to exchange information, to gossip about people and things, to chat about what was happening in the school and outside, to catch up with one another on what is going on in each other's lives while waiting for people to join in. They meet and have coffee before hand so that they can do the chit chat. During the meeting, they talk about what each other had been doing or think about doing and are there any bids or potential bids for money because they have to generate research funds. They also discussed about what they were doing in the current, what were their strategies, what were their themes and their research area to give them some kind of strategy and direction or sense of purpose.

5.3.1.6 Summary on groups' profile

Of the thirty individuals, twenty-three are academics, three are practitioners, two are research associates and two are PG students. The members come from different divisions/schools at four universities and three institutions. These groups ranged from different disciplines such as Arts and Social Sciences, Business and Management, Clinical Studies and Information Systems. They were targeted in order to compare functioning across settings (i.e. to include variation). From the profiles above, clearly, the groups demonstrated CoPs' characteristics and fit the requirements or purpose of this research. They were self-directed and self-motivated individuals forming a community of inquiry (as researchers) when they chose to engage in these groups. Members have come together in mutual engagement, shared interest and practice. When the researcher attended these research groups' meetings, she noticed a high level of social interaction among CoP members, they are informal, self-organising and self-sustaining communities with activities directed towards scholarly and research activities as well as sharing about personal matters. Even though they use emails to communicate out of meetings, most social interaction occurs during the meetings because they bring everyone physically together. In short, the groups targeted covered a wide-range of disciplines, different divisions, different institutions, different levels of people and different practice. Table 5.1 summarises the groups' profiles. The purpose for each group is intentional and not spontaneous. Ideally, all members of these groups should benefit from participation as mentioned in Section 2.3.4. Therefore, the following section will zoom in into the profile of individuals that have participated in this research before giving an account of individuals' perceived values of their participation in these research-based groups.

Group	Structure	Type or Characteristics	Activities
ClinPrac	*Domain:* research capacity development and improvement in allied health services. *Community:* 2 academics from one university and 3. practitioners from 3 institutions. *Practice:* Working with service users to change practice and to improve research in allied health services.	• Size: 5 core members. • Discipline: Clinical Practice • Multi-disciplinary: physiotherapist and occupational therapist. • Across four organisational boundaries • Existed for more than four years	• Meet once every 3 months for less than 2 hours at any one of the institutions. • Activities: prepare a proposal to address the agenda in allied healthcare and to secure funding; writing up their research journey for publication; develop clinical collaborations with students' projects; gossips and informal chats.
BizMan	*Domain:* individual and organisational learning, emulating the CoP process, exploring KM and developing research. *Community:* 3 academics and 1 research associate from one university. *Practice:* To share their experiences and resources and to talk about the commonality of their work.	• Size: 6 core members (only 4 interviewed). • Discipline: Business and Management • Multi-disciplinary: organisation & human resources and operations management. • Across two divisional boundaries. • Existed more than a year ago.	• Meet once in 2-3 months at the university for more than an hour. • Activities: defining their focus and purpose of the group; talk about research ideas; giving feedback; take their ideas to publications; and share relevant literatures and references; informal conversations.
EngLit	*Domain:* 17th and 18th century literary studies. *Community:* 7 academics and 2 PG students from 4 universities. *Practice:* to provide a platform for PG students working on related fields in different universities to meet and to facilitate contacts with academics from other universities.	• Size: about 25 members in the mailing list. Only 14-16 attend each meeting (interviewed 9). • Discipline: Arts and Social Sciences • Inter-disciplinary: literature, culture, architecture, romantics, childhood, politics and critical theory • Across organisational boundaries (4 universities). • Different level of knowledge: professors, readers, lecturers and PG students. • Existed two years ago.	• Meet twice a semester at any of universities for less than 2 hours, usually on a Friday. • Activities: two presentations by PG students and academics in terms of their research, a passage or a poetry; take a coffee break between the two sessions and finish off with a drink afterwards; circulate the synopsis of each meeting; informal talk.
EngHis	*Domain:* feminist approach of doing research in their respective area of interest. *Community:* 4 academics from one university. *Practice:* work on aspects of feminism and look at the way women are represented in literatures.	• Size: four core members. • Discipline: Arts and Social Sciences. • Inter-disciplinary: American modernism, European modernism, Media and History of Arts and Design. • Across divisional boundaries: English and History. • Existed more than five years ago.	• Meet in the evenings for a meal or at somebody's house or faculty rooms, once every three months • Activities: talk about ideas, compare work, what they hope to achieve and how they can assist each other; organised a conference that led to editing a journal for publication; talk about office politics and personal matters.

| InfoCom | *Domain:* research related to computing and information systems. *Community:* 7 academics and 1 contract researcher from one university. *Practice:* to establish the group as a research centre; understand members' different research areas; and build trusting relationship between individuals. | • Size: 5 core members and more than 15 periphery members (interviewed 8: all core members and 3 periphery members). • Discipline: Computing. • Inter-disciplinary: information systems, information storage and retrieval, information science, image data, information management, information and communication management, computer science and information planning. • Across divisional boundaries: business information, computing and information studies. • Existed more than a year ago. | • Meet once a fortnight for about an hour at the university. • Activities: cement relationships; create a strategy document to propose as a research centre; keep each other aware of current research grant; put joint bids together; and information sharing i.e. what they were doing, their research strategies, their themes and research area; informal chit chat and coffee before the meetings. |

Table 5.1: Summary of Research Groups' Profile

5.3.2 Participants' profile

This section describes each participant's profile. The intention is to introduce each participant, featuring their various backgrounds, research interests, their participation in research groups and their responsibilities in their respective institutions. Instead of describing the participants from the researcher's perspective, the profiles were extracted and compiled from the transcripts, using what each participant had said about themselves. The rationale behind this is to present each participant as closely to their personal description as possible. This level of primacy is important to providing a more meaningful presentation of the data.

Table 5.2 presents the profiles of these participants and these profiles will do four things: (a) state their status and how they are affiliated to their respective institutions; (b) describe their roles in their institutions; (c) provide their research interest; (d) briefly

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mention their research activities; (e) explain their participation or relationships in the group; and (f) since when they have joined the group. As highlighted in Section 5.3, participants' names are pseudonym, institutions' identities are covered and individuals' affiliations have been edited to remove any direct references.

Group	Name	Participant's Profile
ClinPrac	Pauline	An academic, a principal lecturer at a university in healthcare studies. She was in clinical practice (physiotherapy) before she joined the university. She is now an active researcher and a holder of research grants. Her responsibilities include research capacity development in allied health services and she tries to develop clinical collaborations with students' projects so that they can be involved in real life, real time projects in practice. She has joined the group for more than four years.
	Ashley	She is a practitioner, holding management responsibilities in the occupational therapist department of a clinical practice institution. One of her responsibilities is to lead research activities and set the precedent for the service. It involves teaching and enabling people to do research. She collaborates with therapists within the service to develop evidence to support their practice. She has been with the group for more than four years now. She has done her Masters studies with the university and one of the academics in the group is her mentor. Before she joined this institution, she was an academic. Both Heidi and she are planning to do their professional doctorate in the near future.
	Karen	A practitioner in one of the clinical practice institution. She is a senior physiotherapist and is holding a management position in the institution. She is involved in clinical assessments, supervises junior physiotherapists and plays an advisory role to more senior member of staff. She has joined the group for more than four years and has done her Masters studies with the university.
	Heidi	As an occupational therapist at one of the clinical practice institution, she has the responsibility to improve allied health services professionals' research and have research more embedded in allied healthcare. She takes the lead in pubic patient involvement and has been with the group for more than four years. She has completed her Masters course with the university and one of the academics in this group is her supervisor. She is now planning to further her studies in a professional Doctorate course.
	Alicia	An academic in healthcare studies at a university. An active researcher and a holder of research grants. She is responsible for increasing service user/carer involvement in the curriculum for occupational therapy and physiotherapy at the university. Both Pauline and she are involved in linking students' projects to clinicians. Before becoming an academic, she is a clinician (physiotherapist) and later came into the university as a doctoral student. She has joined the group more than four years ago.
BizMan	Sally	A principal lecturer at a university with managerial responsibilities. Her main research interest is in organisation and human resource research focussing in management learning and development. She is a practitioner in management development before she joined the university. She is now pursuing her doctoral studies with the university and one of the members is her supervisor. She has joined the group more than a year ago.
	Leah	She is a research associate in a research centre at a university. Her responsibilities involve writing proposals, securing research grants and making business presentations at organisations. She is a doctoral candidate at the university and her research interest is in best practice and organisational learning. She joined the group more than a year ago.

	Peggy	She is a principal lecturer at a university with managerial responsibilities. Her work involves around corporate management. She has joined the group due to her past experience in joining other groups and is an active researcher with a wide range of publications. Her research interests include learning at work, management development and learning. She has joined the group more than a year ago.
	Becky	A principal lecturer at a university with managerial responsibilities. She is also involved in some consultancy work. Before joining the university, she is a practitioner in human resource development. Currently, she is pursuing her doctoral studies and her research interest is in communities of practice, learning and continuous professional development. She has joined the group more than a year ago.
EngLit	Andrew	A professor in the Arts and Social Sciences discipline at a university. His research interest is in English specialising in the literature and culture of the 18th century in Britain. An active researcher with significant publication records and experience of winning research grants. He has joined the group since it first started, two years ago.
	Roy	He is a reader at a university. His research area is in the art, design media and culture specialising in the 18th century English literature and English poetry. He is an active researcher and has co-authored books and was editor of a collection of essays. He has joined the group from the start.
	Julia	A PG student with some teaching responsibilities at a university. Her research comes in the romantic period of the 18th century specialising in interior design or architecture. She has joined the group more than a year ago.
	Gail	An experienced academic but with no job at the moment. She used to teach before she started a family and became a full-time housewife. Now, with household matters settling in she wishes to continue her career. She occasionally does some part-time teaching at one of the university and she hopes to get a job soon. Her research interest is also in the 18th century period. Currently, she is preparing some documents for conferences and publications. She has joined the group about a year ago.
	Daniel	He is a senior lecturer in the English division at a university with some managerial responsibilities. His research interest is in modern literature and politics in the 17th and 18th century literature. He is an active researcher and has published articles and books. He joined the group from the beginning.
	Scott	A professor at a university with some managerial responsibilities. His research interest is in 17th and 18th century specialising in critical theory. He is an active researcher with a wide range of publications. He joined the group since the beginning.
	Michael	He is a reader at a university. His research area is in English literature, language and linguistics specialising in the 18th century children's literature and political novels. He has just joined the university six months ago and has been with this group since.
	Lillian	She is a PG student at a university. Her research area is in English specialising in the 18th century literary studies childhood studies. She has joined the group more than a year ago.
	Chris	A senior lecturer with managerial responsibilities a university. His research area is in English specialising in the 18th century, Anglo-American Literature. He is an active researcher with a wide range of journals and books published and a co-editor of an online literature. He joined the group more than a year ago.
EngHis	Vivien	She is a senior lecturer with managerial responsibilities in the Arts & Social Sciences discipline at a university. An active researcher and a holder of research grants. She is co-editing a special issue of an international journal (an outcome from the conference they organised). Her research area is in English specialising in American modernism. She has joined the group since 1999 (more than five years ago).

	Rachel	A senior lecturer in the Arts & Social Sciences discipline at a university. Her subject area is in English, looking into contemporary materials on media and she has joined the group since 1999. She is an active researcher and is co-editing a special issue of an international journal. She has joined the group for more than five years.
	Susan	She is an academic, a new staff at the university more than three years ago and have joined the group since. Her research interest is in English focussing in European modernism. She is an active researcher and a holder of a research grant.
	Hazel	She is a senior lecturer with managerial responsibilities in the Arts & Social Sciences discipline. An English degree holder but her work is mostly History of Arts & Design and the representation of women in popular culture. She is an active researcher and is currently writing a book for publication. She is also co-editing a special issue of an international journal and she has joined the group for more than five years.
InfoCom	Don	A reader in the Computing discipline at a university. His area of interest is in business information and information systems (IS). He leads the IS and organisation research group and is an active researcher with significant publication records and experience of winning research grants. He is a core member of the group and has been with the group since it started, more than a year ago.
	Joy	She is a senior lecturer with managerial responsibilities in the Computing discipline at a university. An active researcher and a holder of research grants. Her research interest is in IS focussing in storage and retrieval techniques. She was a practitioner in the area of information, library and records services industry before she joins the university. A core member of the group and has joined more than a year.
	Lily	A principal lecturer and a reader in the Computing discipline. She also takes on managerial responsibilities at the university and is a leader and a director of a research centre. She is an active researcher with significant publication records and experience of winning grants. Her research work is in IS specialising in user of information in a variety of contexts. She edits a journal and she is a core member of the group and has joined the group when it first started.
	Mark	A research professor in the Computing discipline who is working abroad and comes occasionally to the university. He is also a practitioner and is an active researcher and has been involved in lots of research projects conducted and funded overseas. His research area is in information management. He is the group's overseas contact for research updates and possible funding. He is a periphery member of the group and joins the group meeting as and when he is in UK.
	Macy	She is a principal lecturer with managerial responsibilities in the Computing discipline. She was a practitioner before she joined the university. Her research interest is in business information looking into image data. She is an active researcher with a wide range of publications. She is a core member of the group and has joined the group more than a year ago.
	Annie	A senior lecturer with managerial responsibilities in the Computing discipline. She is an active researcher and is a holder of grants. Her research interest is in IS specialising in information and communication management. She is a periphery member of the group and has joined the group more than a year ago.
	Emma	She is a senior lecturer in the Computing discipline at a university and is involved in consultancy work. She was a practitioner and senior research fellow before she joined the university. Her research area is in computing based on social theory. She has joined the group more than a year ago.
	Stella	A senior research fellow in the Computing discipline and an active researcher involved in various research projects. She is an editor of a journal and her research interest is in IS looking into user information needs, information planning strategies and audits. Before joining the university, she is an independent consultant in IS. She is the core member of the group and has joined the group more than a year ago.

Table 5.2: Participants' Profile

Reviewing the participants' profiles above, it is acknowledged that each individual is unique in terms of their personal and professional background but also evident are the similarities between them that draw them together to form communities. This is what leads to differences in their participation and the subjectiveness of their interpretation of the value of the membership. Therefore, it is not the researcher's intention to comment on these profiles but they are for the purpose of setting the scene and context of which the study took place. In what follows are the exploration and the explanation of the findings of this study. They are presented and discussed in the light of the research context described above.

5.4   PRESENTATION OF FINDINGS

In this chapter, twenty perceived values are presented based on data obtained from interviews and where possible, observation data is included. It is acknowledged in the literature (Section 2.4.4) that value is complex and is interrelated. They are valued for a wide plurality of reasons and each value leads on to other values. This study provides no exception. Therefore, at one level, many if not most of the themes are interrelated. However, when presenting the findings, they are listed and explained one by one. This is to facilitate the presentation and for clarification. Thereafter, in the next chapter, a more holistic approach and an intense scrutiny of the data was adopted to distinguish individual's perceived values in the data and its interpretations to answer the research questions. Effectively, it will discuss the connection between each value and the interpretation of why participants have said what they said.

In each value presented, participants' quotes or excerpts are included as representatives of the perceived values that have emerged over the course of analysis. They are direct evidence from the data giving descriptive examples to illustrate the points made and to bring data to life. These quotes were selected for their coherence and flow and their aid in showing the interconnections between different perceived values as well as serving the purpose of this study. Hence, some accounts convey many themes but need to be presented as a whole as it only makes sense when presented in context with other perceived values. Sometimes an excerpt that contains more than one theme will be used more than once when it is necessary to provide further insight but this is avoided where possible for the sake of brevity. Thus, values are expressed in various ways: they may include several excerpts to provide a breadth of perspective or they may serve as an example. In certain sections, more imagination is required to flesh out a particular interpretation. Elsewhere, longer excerpts have been edited, where appropriate to serve the purpose of the study. However, at the same time, efforts were made to maintain authenticity and preserve or enhance the "gist" of the story. Taking the suggestion of Taylor-Powell and Renner (2003), in any event, enough text is included to allow readers to decide what the respondent is trying to convey.

In short, the excerpts included provide a chain of evidence for making sense of the data, to amplify the narrative context and rendering meaning. In order to present the data clearly, idiosyncrasies, hesitations and repetitions were removed while making every attempt to remain respectful of the content and intended meaning of each individual's words. To illustrate the perceived values, the researcher has selected the most significant or the most highly representative quotation from participants to convince

readers of the reality of the events and situations described, and the plausibility of the researcher's explanations. In effect, the text presented is an authoritative account of the individual in question. All transcript quotations are highlighted in italics to distinguish them from other comments.

5.5 FINDINGS

This section reports the results of NA of the interview data, looking at the narratives as types of stories for conveying underlying values and its reflective meaning since the plot in the stories concerns individuals' experiences of their participation in their respective research groups. Analysis was conducted looking at the form of the narrative in terms of its structure, the interaction between members and the activities of the research groups concerned. In all stories, the participant is the narrator and the main actor.

From the analysis process, the findings revealed that the membership is valuable as it has helped and supported members in their research and have impacted them personally and professionally. These are participants' responses when direct/indirect and probing questions (please refer to Appendix I) were asked e.g. how by joining these research groups have helped them in their research or why do they think it is worthwhile or how it has impact them. The following are the members' perceptions of the values and impact they have gained out of the research groups' membership.

5.5.1 Autonomy and freedom to think beyond

One of the aspects that have influenced individuals' perception of the value of these research groups' membership is the setting of the respective group. These settings refer

to the group's settings in which they participated in: how it operated, how effective they were and the way it has influenced how they feel. Many commented that it is a conducive and relaxed environment to talk about research, providing the right conditions for positive outcomes. For example, Annie explained that

> *the group is very informal and there is no pressure in the sense when you have time you can go in and when you are busy you just step back a little bit. If you can't go, you can't go. If you can't meet the people, you can't meet with them but the very fact that it exists and when meeting is called, they are places you can go.*

This means that members felt that it is not compulsory or forced on them to attend the meetings. Chris mentioned that *"it's not a forced thing"* and members had a choice to decide their participation as well as there is a place to go and talk about research when they needed to. This is further confirmed when the researcher participated and observed during the meetings. It was noticed that the setting is informal and there was no pressures since everyone was equal and they respected each other. This created an environment where members can be seen to fully enjoy and immerse in research. Therefore, participation is voluntary and members participated because they wanted to, not because they felt they had to. Members also felt that there was lesser pressure because there was no competition or people getting at your back because *"nobody is out to win."* For example, Alicia mentioned that *"there wasn't any scoring, you felt that it was an open space"* and Chris noted that *"nobody is competing against each other or nobody is seen as having to. It is a nice forum to be in. There's no pressure to do anything really although than just enjoy it and join in.*

Chris' comments brought up the point that there were no deadlines and they do not necessarily have to deliver results. Confirming Chris' comments, Emma mentioned that

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"it doesn't have to have an outcome. It doesn't have to be valuable. Also, it is alright if

they have nothing to say or have not said something brilliantly. As Gail described,

> *the fact that it is very informal and welcoming, when I come in the first meet I don't think I said anything (laughed). I just sat there but then I gradually felt more comfortable, I've got to know people and they've got to know me. I do feel relaxed. ... and if you said something that is not particularly brilliant no one's going to mind (laughed) or sometimes others think it's fascinating but that's fine.*

Gail's example indicated that the informal setting has encouraged members to relax and

open up themselves for informal chats, to get to know each other and to talk about their

research. Scott agreed with Gail's sentiments and further confirms that *"the more*

informal note of a meeting usually draws out more meaning and it enable people to have

more freedom to talk." This is especially true in the EngLit Group as it was observed

that during the coffee break, members were talking to each other regardless of the topic

of discussion, the institution they were from and their level of expertise. As commented,

the academics and the PG students found the coffee break useful as it helped break down

barriers to communication and created an opportunity to talk to each other. Lillian

mentioned that *"it made me more able just to join in and say things without worrying*

about the consequences too much." Daniel further elaborated that

> *the coffee break is really a more informal extension of what's been going on before the coffee break takes place and it gives me an opportunity to speak to people particularly the PG students that come along, in a more relaxed atmosphere to find out what they are doing, creating an atmosphere which is more conducive for people to speak out. It helps to break down but it doesn't break down completely, to make it more relaxed and it's easier to communicate on what PG students are working on in a friendly kind of receptive way.*

From the make-up of individuals mentioned in the EngLit Group and the other groups'

make-up, it revealed that these groups are not only opened to people within a specific

group, division, discipline or institution. The groups' profile has evidences of members

crossing divisional, disciplinary and institutional boundaries. Moreover, it is available to students and also to people who are not affiliated formally to any institution. Really, it is opened to whoever making enquiries in the domain or the research area the group is interested in. Thus, it made it easier for people to join especially in the case of Gail who is doing part-time teaching and is trying to get back into the profession after a long period of break. She expressed that *"it's nice and it's informal enough for people like me who aren't connected to any institution who would like to attend. If it was much more formal then it wouldn't allow outside people to come in."*

Members find this valuable since they are not bound by institutional boundaries, hierarchies and their duties and responsibilities. Participants felt lesser pressure and felt released from obligation of acting within a particular role or acting out a single characteristic that constrained them from sharing. Alicia indicated that *"there was no hierarchy, it was completely a non-threatening environment, there were no member of staff, no particular supervisors, I felt very comfortable."* A second member, Pauline mentioned that *"there is nothing hinging on us, I'm not being part of anything I have to fulfil, something I do because I want to do.*

Additionally, members stated that they had the autonomy, personal freedom and are free to act independently. It enabled them to independently pursue and explore their own ideas and intellectual directions. Emma mentioned that *"I brain storm, I just get crazy, I get random and explore intellectual ideas because I can."* This gives room for members to be creative and have the freedom to think beyond their research boundaries. Leah pointed out that *"I suppose it [the group] takes me just beyond a little bit, takes me into*

a space where I can think and I can explore ... almost the freedom to think beyond my boundaries. In addition, it allowed them to be more flexible and facilitated them to develop meaningful understanding of the subject matter and modes of thought which resulted to a broader view of their areas of study. This empowered them in their research and created an environment conducive for constructive and critical enquiry.

Vivien, in her reflection stated that,

> *it [the group] has forced me to think outside a bit or beyond my own very narrow research interest. ... being in the group has forced me to be a bit more flexible and to think about ways in which I think can collaborate with other people, the contribution I can make to a research project that is not specifically in my area. So, I think that's an intellectual challenge which is good for me. It kind of stretches me in ways I wouldn't otherwise be stretched.*

Daniel who had similar experience, noted that

> *it makes me think outside the normal areas of thought. It also makes me engaged with material in a way that I haven't thought of looking at it myself before. I am usually infect from the angle that I'm not particularly conversant in and it gives me a rounder intellectual grasp of the period that I'm interested in.*

In light of these comments, it implied that members forget about boundaries, power and hierarchy. They talk to each other without regard to departmental or vocational boundaries. Therefore, the atmosphere is relaxed, informal, no pressure and participation is voluntary. This created an environment that is conducive for members to open up and talk or to contribute and this led to autonomy where people feel the freedom to talk and to think beyond their research boundaries.

5.5.2 Sources to ideas

The examples above implied that these research groups are places that foster creativity as members have the autonomy and freedom to run, try or test out ideas. This stimulated

their thinking and helped to develop new ideas. It was also mentioned that these sources

to ideas and inspirations come from the informal chats and exchange they have in the

meetings. Pauline confirmed that *"my thinking is stimulated by being part of the group*

with others and I can test out ideas. It helps to develop creative thinking and also from

small conversations big ideas can grow."

Some noted that their participation in the community is challenging as it helped to refine

their thinking and contributed to the development of new insights. These spin-offs were

important because it initiated thinking and helped spark-off new ideas which may be

further developed into possible research project. The following are three examples:

> *Annie: There was a time when we were discussing about a particular area of research, nobody had it formalise yet. It was an area, quite good and it was about ... which is one of things I was doing. We're just talking about that and in that meeting it was just throwing ideas around. Then a group of four of us actually went together and said this was really good. I'm not sure if anything will come out of it, we can just go away and talk about many things but it doesn't matter because the seed is planted and I'm quite sure that we pick it up again. So yes if somebody mentioned something I'm really interested in, I say hang on, that's me.*

> *Lily: One of the members said something and advised me to go for that and that I mean set the scene and it begins. I mean you have to sow a seed in turn for grass. What this guy said went into my brains and I thought, oh yes and this has to be that oh yes moment because I can then say, right I can run with it, talk and went to an immediate colleague, oh that's a good idea, talked to the school and they mentioned oh that's a good idea, so that's how these things get going.*

> *Scott: Some of the ideas were there and just through chatting and various things that happened after some of the papers, we [Scott, Andrew, Daniel, Chris and Roy] came up with this project. It creates a setting where likely we would discuss things and trying to come up with something more original.*

This is because it is the nature of these meetings to provide the unplanned and

unstructured opportunities for the accidental coming together of ideas that may lead to

the serendipitous development of new ideas. This is evidenced in the meetings the researcher attended where ideas generally grow out of a dialogue that transpires between members when they are brainstorming ways to overcome a problem or to address a particular need. They connect with others, listen and elicit the cross-currents of doubt, debate and exploration that surround any new idea. The communication and discussions with other members opened up new ways of thinking and this resulted in the creation of new knowledge or the application of existing knowledge in new ways. Emma describes using an interesting analogy:

> *the value of being a member of the group is that I have a forum in which to discuss ideas that are around the thought and theory of information systems. So I might have ten ideas that I want to explore. Only two of them are really going to be good ideas. There's an English expression, you've got to kiss a few frogs before you find the prince but you don't know which frog it is, so you've got to kiss a lot of frogs before you have your prince. You've got to have a lot of ideas before you get the one or two that are actually going to turn into something that is very substantial and offer real changes to how society works and technology. ... If you have ideas all of the time, they're throw away items, they're not precious and what you get with an informal community is the ability for them not to be precious. You can just have them and throw them around. You know again the tendency to just bat them about. It doesn't matter. So this group allows an opportunity to kiss a few frogs before I actually know who is the prince and then I just take the prince forward (laughed) without embarrassing myself in public. It's just an intellectual exercise and yet every now again you come out with a prince. And that's great and you take it to the formal meeting and you say you want to pursue this and this is the plan for our research. ... Then I leave them into the formal space for discussion and validation. The things that have gone to the formal agenda are the things that have come from the coffee pot.*

However, members mentioned that in order to feel comfortable sharing almost anything with each other, there need to be trust and confidence in each other. Vivien was succinct to say that *"I find it comfortable to relate to them [the members] and I trust them. It wouldn't work if I felt that my secrets weren't safe (laughed)"* and Emma was eloquent and described that *"I don't share with people I am not comfortable with. I have to trust*

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people to share with them. So the friendships that I made in the informal grouping are

about trust and sharing. " Given the trust, members see the community as a safe haven

to experiment and take risks, which can be difficult to do on a team or in a function.

This is reflected in the Pauline's comments saying *"one of the things about being part of*

the group is that you can test out ideas in a safe environment. Confirming Pauline's

assertions, Hazel explained,

> *the kind of approach we take, the feminist approach which some of my male*
> *colleagues reacted perhaps with some antagonism (smiled). It is safer for us to*
> *work together and not have to share that time with our male colleagues and I dare*
> *to talk to each other in terms of looking at women's experience from a theoretical*
> *point of view. So it's good for us to be able to go somewhere where we can keep*
> *ploughing away the way we're doing and use the approach that we use.*

Moreover, Alicia mentioned that *"I felt very comfortable, just exposing my ignorance*

for the case of practising. It just seems a very non threatening space to practice. "

Intuitively, members understand that the gift of trust involves the choice of forbearance.

They trust each other because they believed members would not take advantage of them

and would not use their understanding of individual's vulnerabilities to embarrass or to

denigrate or to subordinate. Therefore, members felt comfortable to disclose and share.

For them, there is no competition, nobody is out to win and they believe that everyone is

committed and is trying their best. Daniel explained that

> *you know to work intensively on a research project with somebody I've got to trust*
> *that person that I'm working with to working at the same kind of level I am*
> *working at and at the same kind of commitment to the project to I've got. And if*
> *they haven't got that then it can cause serious problems and then it becomes*
> *something not worth doing.*

Becky confirmed that *"they [the members] were friendly and comfortable. It really was*

and research can be very competitive and some people choose not to share and there

was nothing that was not shareable in the group." Thus, the nature of interactions in these research groups are indeed sources to ideas and in order to develop ideas and to be creative there need to be mutual trust including appropriate expressions of commitment, support and intimacy. This gave members a feeling that everyone is bringing their knowledge unselfishly to the table and shared what they know. They encouraged, helped each other and collaborated based on trusting relationships.

5.5.3 Sounding board

When members have ideas, there need to be a place where they can bounce it off or test them out. Emma continued and pointed out that

> *I just have those sparky ideas running through my head and the way those sparky ideas turn into something is when I have it and it's fresh I can talk to somebody. I can fire it off and I have somebody to bounce it off. It's about having a white board there when I need one or always having a pen and a piece of paper. ... If I'm exploring ideas with a friend who happens to be an understanding member of my research community then I can talk about the frogs, throwing out everything.*

Joy mentioned that "*if I was thinking about putting a new bid or considering something I could take that to the group and they allow me to brain storm, allow me to bounce ideas and give me some good feedback.*" This pointed out that the group provides an occasion for members to learn how to explicate their thinking, especially those half-baked ideas. It enabled them to throw or bounce off ideas, be reflective and to establish their thinking. Alicia noted that "*I was able to present on anything that I wanted to, the stage of my research, my thoughts about methodologies and a lot of the things I discussed at those meetings helped me formalise my thinking.*"

Members found this valuable because the process of articulation can result in feedback and solutions. Quite often during the process of articulation or educating someone else about their problems, they can listen to themselves and may see the answers for themselves. Vivien indicated that *"it is not just talking through certain things that I've been thinking to myself but I need to articulate it to other people to see what they think and also to hear how it sounds out loud."* Peggy had an experience that echoed Vivien's, she explained that

> *the social interaction is important where it is a forum for me to talk it out, to talk about my research. When I was doing my research I was talking very much to my husband because I am the type that like to tell people what I am doing. Now, I tell it to the CoP members. From telling people, I can hear what I am saying, understand what I am doing, can also know what others think and what everyone think about it and it can help me bring out ideas. It is really a forum to voice out.*

Ideally, members found these groups valuable because they acted as sounding boards to ponder on common issues and explore ideas. As they spend time together, they typically share information, insight and advice and this helped solve each other's problems since they can get members to listen to their situations, their aspirations and their needs.

5.5.4 Intellectual discussion

When bouncing off ideas, members have indicated that others need to be at their level and have the basic foundation of knowledge for the discussions to be successful and to be of quality. In order to have an intellectual discussion, other members need to understand their work and need to be talking at a level where one do not have to keep going back to explain. This adds on to the quality of the exchange and avoids frustration. Emma argued that,

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I can't just discuss with anybody. I got to have an audience that at least have a level of understanding of an acknowledgement of the complexity the work that I try to disentangle. They have to be informed at least. They don't necessarily need to know the intricacies of my work but they at least need to have a common discourse established. I have to establish that the other people that I am talking to understand what I mean by that word. Now, if I just want to sit and throw ideas around I don't want to have to go back to that level all the time as establishing a shared understanding. I need to know that the level of understanding just exists, that I can just throw these ideas around. I can just run about something I am enthusiastic about without having to keep stopping to explain the terminology that I'm bringing into play. These are the people I can hold discussions about my work on my research where I haven't got to keep going back.

By establishing that fundamental understanding, it enabled members to fully immerse in the discussion and enjoy it. This is personally experienced by the researcher when she attended some of the research groups' meeting where she cannot fully comprehend the contents of the discussion but it was seen that the discussions were intense and members were engrossed in it. Chris mentioned that *"I like the pleasurable intellectual interaction because I don't necessarily get to talk to people who are at my level or doing the same thing as me."* This is where members congregate to debate and to explore new ideas. They appreciate and value these intellectual discussions because some of their disciplines or their specialised area of study is narrow and there is only a minority of them, especially in the EngLit Group. Most of the time, they cannot find others or cannot find a critical mass of people in their area of studies. These meetings enabled them to come together to discuss the intricacies of their esoteric specialty. Roy asserts that *"I can have a discussion where I couldn't have with a single university because there's just not enough people.* Scott further explained that

> *if you're interested in the 18th century and you know it's a minority interest. It's always very pleasant to speak to other people who know what you are talking about in that sense because very few people talk about the entire length of the period. You can actually discuss things and it simply speed things up that you*

don't have to get back to get information because when you mention an obscure name in that period, all specialists will know what you are speaking about.

Daniel pointed out that,

it's always good to get together with colleagues who work in areas similar to mine because it broadens my knowledge. ... I mean whatever idea they give is sort of indirect. They asked about the material that I am studying in relation to the paper that I've just given. Their approach may be radically different but I get an angle that I wouldn't normally get and I may or may not find that helpful. It's not always the case that they are directly helping me by making me think of something that I might not have thought before but it's sometimes just as useful to have that perspective raised so that I can dismiss it rather than not thinking about it at all.

This indicated that members were happy with the interaction and the exchange of ideas. Rachel affirmed that *"it is a really good interchange of ideas and I like that exchange."* This is because through these discussions, members get a chance to be more exposed to ideas and hear more diverse kind of things. Michael described that

I am actually hearing about a lot more diverse kind of things. It's something I'm interested to hear about and it's quite fun to hear about how people have worked in different areas which touched on something I do but I am not an expert here. So it allows me a certain freedom just to engage with these subjects, kind of feel fresh.

From the practitioners' perspective, these exchanges of conversations are valuable to avoid getting into routine of their practice and to get an external voice to challenge their practice. They take it as a chance to reflect and evaluate what they are doing daily in their practice. Heidi explained:

I have enjoyed the academic stimulation which when I'm in the day to day practice I don't often get that time out just to step back, reflect and think about well what am I going to do to evaluate this, how am I structuring this, what's my question here and I think it really helps when I have somebody come in and say tell me about that and how can we look at that differently. It's about meeting to have my thinking challenged and have questions as I tend to get into a routine and a pattern of doing things.

Hence, members found these discussions valuable because to be able to open up their thoughts for discussion was a good chance for them to get to the bottom of things. Regardless of the differences in their area of interest, they reflect or ask questions with regard to a variety of different ideas, or from their respective angle of thought. This contributed to the intensity and the depth of the discussions and members appreciated the opportunity to sort things out. They felt that it was good that they talked it over as it challenged their thinking and they can know where they stand.

5.5.5 Like-mindedness

Another aspect members have highlighted which can strike a good discussion is to be in a community of like-minded people. They indicated that they participated to exchange knowledge within a community of like-minded members because it created an opportunity to share similar opinions, ideas or interest. This is valuable as they felt that people were talking the same language and they understood each other. Karen expressed that *"it is nice to come together to meet people who think similarly to what I do and that it's nice to share ideas and it's nice to get a matched work, to be able to liaise with other people"* while Ashley spoke that

> *it's good because I have interest in research to get together with like-minded individuals who have a natural interest and motivation to pursue research in allied health. ... I can talk to people who also are interested in research, who talk the same language who see it as fundamentally important. I'm not having to persuade them, I'm not having to bang the view of we really need to be doing this, it's fundamental to our practice. They're [the group members] already there with me.*

Along the same line, members indicated that they are happy to know others shared similar vision, dream or value and they understood each other's situation. This is

because they shared the same opinions and there is a mutual understanding of where each other are coming from. Heidi conveyed that

> *I think being together with the group of like-minded people who have a similar vision, both are experiencing same constraints and the same value within practice to either do some research themselves or to encourage others to do research and that real shared understanding between the group of what the issues are because sometimes they don't need to articulate it. I actually know and understand where each other are often coming from. ... I was very happy to meet other people who share my dream in some ways, shape or form.*

Another member of the same group, Pauline excitedly stated that

> *everybody was like-minded and was working effectively towards the same goal. It really gives me a feel good factor which sometimes I don't get from everyday academic life as it can sometimes be full of conflict and be quite hard plugged to get things done and to have a situation where everyone around the table is working towards the same objective, is like minded, value each other's contribution but yet the contribution interlock rather than overlap. I remember walking out the meeting thinking, that's what it's all about.*

This indicated that members felt good to know that their area of interest corresponds with others, with people coming from different perspective towards the same aspiration. It gave them a sense of satisfaction knowing that everyone is working towards the same direction and values each other's perspective.

5.5.6 Alternative perspective and cross pollination of ideas

Although members appreciated the like-mindedness since they do not have to convince each other to see their point, they do not mind if others have alternative views to raise a debate around the area of interest because members denoted that this made discussions more meaningful. For them, like-mindedness does not mean homogeneity. Instead, to have people coming from different perspectives makes the discussion more rewarding as members can gain a wider view of their research area. Ashley commented that

we're working in different settings and we've got a mix of some people. ... We're multi-disciplinary and we're lucky we've got people in the group who are all experienced researchers so that's the benefit of it and I can get feedback from others. So for me I get a lot broader perspective as well."

This exemplified that members found these different perspectives valuable as they believed that these are feedback or comments from knowledgeable peers. They welcome the exchange, the interaction and the availability of feedback because it was noted that they gained insight from responding to questions and then comparing their responses with others, gauging their ideas and expertise. This is evidenced in Lillian's example where she indicated that one of the greatest values is the rich interaction offered by the community since they are inter-disciplinary coming from different backgrounds. She mentioned that not only is interaction important but so is the exposure to a variety of viewpoints and experiences that gives her a broader perspective of her research.

> *in terms of my research, it's very useful because the group is inter-disciplinary and that I think for me has been really helpful. For example, some of the things to do with the study of childhood in English literature or different to the things that occur with the childhood studies in other area like Education and History or whatever and it's interesting to look at why the differences might have happened but I don't often get the chance to interact with people outside your own department. It has given me the opportunity to address people who weren't in my area and just get different sets of question. I get to know how research is developing in other fields and bring it into mine and usually that's useful.*

Moreover, members recognised that there are many solutions or ideas to each problem and that by proposing theirs, it may get critiqued and they will find a better solution or acknowledgement that theirs is alright. Thus, they share ideas, get help, learn about new ideas and verify thinking. Hazel noted that when she was writing a book, *"I was discussing issues around one of the chapters with my colleagues, particularly Vivien.*

She gave me insights which really made me think again about some of the material I was

doing." In Gail's case, she gave a presentation and she claimed that

> *I have had a very good discussion with them and they've given me lots of ideas and so it's been great really. It helped to confirm things that I have been wondering. You know I have an idea, I have something that I'm interested in and I'm not sure what other people will think of it but it confirmed that other people find it interesting too and that not much work has been done on it. It's nice to know that for that area is worth spending some time on it. So it's giving me all sorts of ideas.*

Scott mentioned that *"I am only too keen to speak to other people and tell them, look*

I'm trying to do this, what do you think of the idea. I think most of us want feedback and

the members do actually feed feedback as much as possible." Another member, Chris,

with similar response commented that *"it allowed me to air my interest and get some*

feedback from other people. This is at the level of actually developing my research. I

can use it as a forum to get questions asked about my research." From a PG students'

perspective, Julia emphasised that *"it's better for my research to get a more rounded*

feedback. In that sense it helps me to broaden my own research inquiry and to think

perhaps on issues or perspectives on my own research that I haven't considered."

Therefore, these discussions has created a forum where members bring in their own style

and different perspectives that the sole researcher would not have thought of or even

known about. Roy affirmed that

> *it is interesting to see how different people respond to it. Most of us have not seen it [the papers] or read it before. It's interesting to see what people make of it and different people say different things and also say things in different ways. People bring to it their own particular style of interpretation or their own particular set of interest sort of to tie different things about different text coming out from entirely different direction. So it's interesting to listen to and I enjoyed that really.*

Members further claimed that these types of discussions keep them on the cutting edge of their functional discipline and it has helped to inspire them to initiate efforts to further widen and build up their area of research. Scott explained,

> *what happens there if somebody's doing something a bit obscure even it's within my period, there's obscure things I'm trying to tie in to what I know, how I contribute to this discussion and how would this change how I would think about the topic. So I would try to use new information even though it is within my subject area to see how it alters my own perceptions. And possibly in fact, I always pick up ideas like that, that set me off in a different train. I go to the library I look up some other things that I have not read before or it might spark off an idea that I mean to try to look up for several years and I would actually go read up on it now.*

This demonstrated that there is a mix of ideas with people bringing their own tools, background, past experience and personal perspective into the discussion which created a ground for cross pollination or cross fertilisation between disciplines, crossing the normal research boundaries and paradigms. Lillian stated that these discussions were *"handy and very useful because there's a lot of theoretical paradigm and cross over from History, Sociology, Education, English. So I can draw upon that general basis that also gives me a common ground and I get to see how it's interpreted differently in different areas."* Lily, a member of different research groups in different institutions confirmed that *"the activities that happen here sort of cross-fertilise really. I sit on these other groups and I bring back ideas for the group here. I hear things when I am there and relate experience here and all that sort of things."*

From these comments, they demonstrated that members are aware that multiple minds are better than one and this is one of the reasons why they wanted feedback on their work. They have used these groups as forums to get questions about their research and then improve it. As these examples illustrated, there is clear evidence of cross

pollination in these groups. Given that members crossing divisional and institutional boundaries coupled with the inter-disciplinary feature, the above have shown that ideas expressed are never the creation solely of the individuals. It is in fact rooted in the relationships and conversations of members whom they have worked with and who have directly influenced their thinking as well as people whose influence has been indirect, sometimes beyond their awareness.

5.5.7 Overcoming intellectual isolation

Apart from getting alternative perspectives from others, members are conscious that it is vital to engage with others in the community to avoid concentrating too much in their ivory tower. Lillian commented that

> well, it's the point of being in the academic circle. I think it's important not to think of myself in ivory tower producing work of genius and understanding of various aspects of the society. I have to interact with people outside the university, people in the university and often the more interaction I have, the vary my work get. So that's why it is important.

This indicated that members understand that research can be a lonely business as Chris mentioned that *"it can be a lonely life and the life of your mind can be lonely if you are ploughing your own narrow research furrow constantly. It's just nice to have that sort of community aspect to it."* Hence, participating in these research groups has created an opportunity for members to study materials out of their normal research boundaries, especially when their research interest is very narrow. This is to avoid being lonesome and isolated. Moreover, to keep away from being too focussed in their research, they tried to find a common ground in which they can relate and link in into others' research. Vivien illustrated that

my research interest does tend to be very narrow which is not necessarily a good thing. When I work individually, it can be quite lonely and isolating. When I work in the university it is also important not to bury myself too much in my own research interest but to be kind of look out and to think about ways which I can connect to other people. So by joining this group, it isn't necessarily playing on my strength or my area of expertise, it's kind of forcing me to make connections with other people in their research interest and to pay a bit more attention to what they're doing and to think about what I'm doing, how what I'm doing might relate to what they're doing. I do think within the context of the university and in the context of academia, that's as important as in doing my own individual research.

Also, when individual's research is very much based in practice, it is important that they do not concentrate too much academically. Instead they need to ground their research in practice to look into the practicality of their research outcome. This is true in the case of ClinPrac Group where Pauline proved that *"what I have gained from being part of the group is, it has been very important for me in terms of keeping my research perspective very grounded in practice and not just knowledge generation and academic ivory tower research but it's been about practice."*

This has also allowed members to overcome the feeling of being isolated. Joy stated that *"I am the only one in my field, whether teaching or research. If I wasn't part of the group I think I will be far more isolated."* Whereas, Macy explained that *"if I work on my own in research it's very lonely because I am the only one involved in [my research]. So when I'm part of an active research group I get over that isolation feeling."*

This is also true when the research subject field is of minority interest or is less popular and it is difficult to get a critical mass of researchers within one institution. This is exemplified in the EngLit Group and members have tried to find each other to avoid isolation. Scott claimed that

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the reason for starting this forum is the area that we're working, most of us work in the 18th century which is probably less popular than most areas and people quite often feel isolated. There is only two or three of us at ... Most of the research done is very individual. When you're researching on your own you tend to come up with quite specific ideas. So the rationale is simply to find out the people to talk to with the same kind of research interest.

Similarly, for PG students, usually their study is in an obscure area and most of the time is very concentrated work, attending these meetings make possible for them to have a broader view of their research area. Julia described that

the reason why I go is to get something for a change. I am on my own most of the time with my own work and it's just nice to hear what other people are doing as well as just to meet different people from different course and not just in [my university]. As long as they are 18th century I can relate to it ... So I just like the opportunity to hear about some other work going on in the same field that I'm working because doing a PhD is a very concentrated work where I don't have time to go off the tangent. Once a while I can listen to what other people have done.

In light of these comments, it is clear that participants are aware that at times, the nature of their research is too focussed and by participating in these research groups will help them to overcome isolation in their work. This implied that they see the need to be opened and to be positive about others' research. More specifically, they find value to collaborate with others related in their field to get a broader perspective and to get a better grip of their subject field.

5.5.8 Move towards collaborative research

Apart from getting out of isolation, members have pointed out that they have participated in the group and have joined their efforts to response to the changes in the research environment and the trend of the funding bodies' grants that are mentioned in Section 2.7. It was indicated that there is a shift towards collaborative research and in

order to gain funding, researchers need to combine their efforts and do larger scale projects. Members are pressured to form research groups and the solitary research is slightly out dated now. Roy explained expansively,

> *There is a shift in research culture in UK at the moment and in humanities because there is now more money for humanities research than they used to be and there's now a dedicated research council where it didn't used to be. The effect of this is going to be that we're going to be expected to research more in the way of scientist than we've done previously [individual research] and part of that is going to be a great citation that there will be project research done involving collaboration. I think that's the way it's going and we're coming sort of aware of that and I think the culture is changing and there's this sense of single researcher who sits in the library and write a book, that's slightly out of date now.*

Other members who have spoken about the change are:

> *Scott: Most of the research done in literary studies and the humanities in the general sense is very individual. In the last few years with the way funding has changed in this country it's been a push towards people forming teams to look at larger scale project.*

> *Susan: There is enormous focus on collaborative research in terms of getting external funding for research and that's a very important aspect of what we are doing now.*

Even though this is the norm, some researchers are not very happy about it. They have indicated that one of the ways to move towards the change is by joining these research groups. Scott commented that *"not all of us are entirely happy with it but it's something imposed to some extent by the government and the funding bodies and that means people do have to meet up, like this forum."* Members find value in joining these forums as it created opportunity for them to meet up and collaborate. Roy emphasised that *"all these things that bring people together like the forum create possibility for collaboration. I think it's more and more important."* Moreover, it helped to foster a positive feeling towards the change, without feeling being forced to. Lillian affirmed that *"this kind of*

group helps push you in that direction in a positive way without saying to people you

have to. It does allow you to take the basic to work collaboratively with other people. "

This means that these research groups gave members a chance to talk on the prospect of collaboration. Especially in the EngLit Group, during the coffee breaks, members found it more relaxing and more intimate to approach ideas and comments that they have passed during the presentations. This way, it gave them the opportunity to tie up the loose ends of what have been said during the presentations to realise it into a research project. Scott explained that

> *what takes place during the coffee breaks tends to be more interesting because it's easier to follow up a point that I wouldn't want to go on at length in the presentations asking several questions in a row for example but I can easily do that if I want to talk to somebody during the coffee break. If I've any idea I want to follow up, I can discuss it precisely at that point. We really just be talking about this sometime so it will float some ideas and people go off and have a drink afterwards and continue to discuss it there. It's more intimate to discuss things that way rather than making a proper statement in front of all people, I can just ask things that I would not ask in a paper if I wanted to go ahead with some kind of a research collaboration and I would say rather obvious thing like what your work is and whether you've got the time to do a bit of collaboration between us. And it's such kind of the nuts and bolts questions you ask in the coffee breaks.*

Thus, members have joined these research groups as a way to respond positively to the changes of the research environment and the informal atmosphere of these groups has enabled them to follow up issues and ideas that may take off into a research project.

5.5.9 Response to research pressure

Aside from the push towards collaborative research, members are also pressured to fulfil research in their respective institutions as well. As mentioned in the literature (Section 2.7.1), research activities are considered as scholarly activities and as part of academics'

responsibilities. Therefore, research activities partly affect the appraisal of academics and participation in any research group is seen as favourable. Andrew mentioned that "*it can help me fill in some boxes*" and Scott further confirmed that

> *all of us report back by the end of the year what we've done in terms of research and all our universities like to hear that there is some kind of co-operation taking place between the universities. ... Something like this forum is considered to be a good idea. The university like particularly regional co-operation. They are very keen on that.*

Moreover, it is expected that individuals conduct research to attract and generate funding in their area of research. Members perceived that joining these research groups is practical in terms of to be seen involved in research communities, doing collaborative work, getting involved in larger scale project which eventually lead to research grants. Daniel asserted that

> *it is incumbent upon us as academics to try to generate research income. So it [the group] has a kind of utilitarian purpose in the context of something we are suppose to do as academics in our respective institutions but it's also expected unison when we get together and have opportunity to discuss our own particular research and I reckon be facilitated by colleagues in a broader project that might attract funding. ... So by being involved with it does me good in the sense to be seen to be involved in collaborative research or forum. If I'm involved in an external group and it eventually means that I can get some funding, some money externally, then it might have some professional benefit.*

Don conveyed that when his department was under some restructuring, it was trying to push people into research and some of the research groups merged. He explained that

> *the school is trying to railroad individuals into areas of research and we had some pressure on us to say could you not merge together. ... It's useful by working within a group which is guarded by its core mission and philosophy and accepts its own agenda. If I wasn't in that group and within that agenda I will be under somebody else's agenda in a different group which I might not be so happy about. So it gives me opportunity to participate and create the strategy and create the working relationship myself rather than having that impose on me. The risk is not being in that group and I wouldn't have that protection.*

Therefore, initially, some members have joined these research groups as a way to protect themselves from these pressures, to fulfil their research responsibilities or even to increase the possibilities of generating funding through collaborations.

5.5.10 Synergy and leverage

As mentioned in the literature (Section 2.7.1), nowadays, the responsibilities of academics are not solely teaching. They are also involved in research as well as managerial activities. Therefore, they are pressed in terms of finding time to do research. Moreover, researching in such environment and with limited resources, members tend to combine their effort working together to create a synergistic effect. One of the benefits of joining their effort is members believed that a higher quality of research is gained. They felt that the research outcome would be better if compared to achieving it alone. Daniel confirmed that *"I think it rounds out into a more rewarded intellectual rather than ploughing along further on my own."*

This is because everyone contributes with his or her specific knowledge and brings in different aspects of the investigated problem. Each member would see how they can fit into the research project, thinking about how to connect what they know in their respective area with what they do to produce a higher quality of research. Stuart, who is working on a particular project with other members in the group, explained that

> *I would concentrate on several novelists which are my particular interest area, Roy would concentrate on poetry, Andrew works on particular things in Cultural History and so it will break down that way. We wouldn't all say to each other that you should write on this. The general idea is you think how your research interest fits into that or what novelist I know that I can write about, that would help that topic forward. All of us would say something about the central theme.*

Moreover, during the meeting members were seen to have been allocated and shared their work based on each others' strengths and skills. This is evidenced in the ClinPrac group where Heidi confirmed that

> *one person will do a literature search on one area and appraise it and bring it back to the group. I got the job of looking at what policy informs allied health professions, research and development and what policy around the research question that we have. So we allotted different task to people and depends on the skills of the group and people's interest and the natural kind of leaning.*

Apart from producing a higher quality of research, another value of combining their effort is that the group served as a leverage to gain influence in their respective institutions. This is true in the case of InfoCom Group, who is working towards establishing themselves as a research centre. Members from different divisions have pooled their resources together to gain more strength in terms of numbers so that they look more powerful than just individuals working separately. This enabled them to present themselves collectively to the management, looking more powerful and influential and they believed they stand a better chance. As Don explained:

> *if we get together, we get more strength in numbers and have better philosophy and a better working environment to get more resources and to protect ourselves. We can report collectively as an individual so we can pull our work and that looks more powerful institutionally than if we are just pushing things through individual. So it gives us a lobby, it gives us a voice and gives us the representation within the research structure of the school and also the research structure of the university. I cannot do that as an individual. I've got to belong to a group to have the power to be able to do that. It's difficult to go individually to senior management but easier representing yourself within a group.*

Besides, the group also served as leverage to bid for funding and to gain access to resources. Members have expressed that one of the reasons that they collaborated is for the implications of funding. Daniel mentioned that they discussed bidding for money on a collaborative basis rather than on a single institution basis because *"it's a better way of*

actually acquiring money than proceeding on your own." Lily further confirmed that

"*it's so much harder to get financial support. You got to work together at it.*" Members

claimed that by working together and representing themselves as a group is a better way

to bid for research money compared to going on their own. Rachel stated that "*having a*

research group helped us to have more access to sources of funding within the university

and outside it." Stella reinforced it by relating one of her experiences,

> *I think organisations like to see that you're attached to some kind of research group. There was once they won't accept my bid because I wasn't part of an organisation or a group. They didn't think that I had the capacity. They are more likely to want you because you seem to be part of a wider activity. They will say that it's more than just you. You have got something behind you.*

Additionally, members gained access to methods, equipment or special competence

because these groups draw them together to share their resources and their expertise.

Pauline illustrated that

> *each of us was providing a different element of what will be required to get there and it felt really like the pieces of a jigsaw that come together like the right people with the right knowledge in the right place were there at that time and that was very important to moving our proposal forward.*

Therefore, members believed that by joining their effort they can pull together their

skills and resources by allocating and sharing work according to their strengths and

skills. This led to a higher quality of research and gave them leverage in terms of

funding as well as a stronger representation as a group.

5.5.11 Time and energy saving

Ideally, as what have been mentioned above, participating in these research groups

permits individuals to be effective in their research. Annie claimed that

it is actually easier to spend an hour in the meeting than it is to spend twenty hours to trying to read up on all these stuff that all these people can bring because everybody knows their own field. Everybody knows their very particular specialism. Now for me to keep up to date with all those specialism, it will take forever. It is worth an hour of my time to be in the room and hearing enough to keep me updated without having to go out there and do it all.

This is why members still find time to attend these meetings even though they have limited time because it actually saves them time and energy in their research. This means that these individuals have discovered that their participation helped them to be more effective in their research and the time spent together is worthwhile. The rationale behind this is they could find answers to many questions or it could save them time later for gathering new information and ideas. With everyone bringing their own views to the group, it creates economies of group input or a pool of knowledge where members can draw upon. This facilitated immediacy or shortcut to find out about a subject matter from the different inputs of members compared to ploughing the field on their own or spend weeks and months reading about it.

5.5.12 Informal ground for learning and training

Through these coming together, members found value in learning from each other. They mentioned that it led to an increased knowledge when members bring in their specific knowledge and respective experience. The examples below verify some of members' learning experience when participating in these research groups. In her reflection, Heidi stated that she has learned a great deal about the research cultures in different divisions or different institutions. They gleaned from each others' experience and she believed that there are lessons to be learned which can be used in her workplace. She stated that

the fact that organisations often handle research in different ways, it offers an opportunity to learn how they approach it and there are lessons through the organisation that could be brought forward to be used in my own organisation.

Members also mentioned that the group has been useful in giving them ideas or solutions that they have used in their research or formal work, and it has became a critical collaborative tool to help them perform their job. They have applied these practices in their daily work and this evidenced learning and the transfer of best practice. Pauline mentioned that "it *has also enabled me to develop useful practice that is beneficial for students' research experience and to help students find projects and mentors.*" Alicia claimed that

> *I was able to bring, to hear and learn an enormous amount of the challenge of getting the user voice into the service delivery. So for me it absolutely harnessed a range of literature and policy document about service users in service development to service users in curriculum development as part of my job. So it was hugely important to me from the level of literature, theoretical development, methodologies used to hear the user voice. So it's very important.*

Other comments reflected that they have learned research practices from members' research experience. From these discussions, members are exposed to different ways of doing research in different environments.

> *Macy: being part of the research group I gained a lot from other people's experiences and listening to what they've done in their research and how they've done things and maybe areas that I've never covered, never been part of my own little research experience.*

Through their dialogue, members shared knowledge about their research and its process. This is observed during the meetings and evidenced in the interviews. Ashley stated that she has gained understanding and skills of researching in the wider context.

> *research knowledge and expertise I've gained because we've got the two people from the university who have done their doctorate so they are sort of a lot ahead*

than I am. So for learning experience, I can learn from them in their discussion and what they bring to the group. They always come up with something new. ... It's about research, about ways of doing research, about different methodologies. We are discussing different kind of methodologies and approaches to research and they've got different experience in different kind of methodologies.

Also, members indicated that they have learned funding experience from others. As they exchanged or shared their experience, the information offered is useful for members because whether or not they have encountered similar experiences, they are able to learn from the stories that members tell. Don claimed that

there's a lot of value to come out of sharing ideas because I will be learning from the experience of other people. It would be information about research grant proposal writing, especially the financial aspects of that, the availability of funds from different bodies, different government bodies, the flow of the information and probably not so specific but informal is politics of funding. I pull in those ideas or pull in that intelligence, so I learn about the politics, how things work.

Moreover, they determined ways they can modify what they currently do and think about how they would handle a similar situation. They gained understanding on the skills required, the strategies and procedures and the politics involved to gain financial support. Joy explained that

there have been some interesting discussions about potential bid and the things that have been said, I have utilised it in my own bid. I have learned things along the way and it has given me a wider perspective on people's attitude at university level, about support for research, about thinking, about strategies for research.

Similarly, members were able to learn about alternative strategies or ideas that might work for them in terms of submitting their proposals thereby increasing their chances to secure a grant. Alicia confirmed that *"I was actually learning about networks, learning about finding funding and how difficult that was, learning about how if you're unsuccessful, maybe take a side-way step and look for funding somewhere else.*

For practitioners, being involved in educational research and bidding for funding is an eye-opener for them. They learned what is involved and get a full picture of the process. Two practitioners had similar responses.

> *Karen: The academics are experienced researchers and for myself, I don't think I am an experienced researcher. I just think that they know the discourse and they just open our eyes to things like funding, local ethics committee, putting a proposal together and just the holistic view of it because as a clinician I suppose I might see the clinical picture or have a clinical idea but it's all the other stuff around it.*

> *Ashley: I suppose the one that is interesting is the one going for external funding and going down that route. That was interesting to go through and know how competitive it is because it's something that I haven't done before. I had a good chance to look at funding.*

Furthermore, members pointed out that they took the advantage of meeting times to share tips and insights about the subtle art of writing for publication. For members who are new or embarking onto it, this forum will be a repository of valuable hindsight collected from those who have been there and done lots of publications. It is a way to discover what one need to know about publication whether single- or co-authored. Lillian expressed that

> *it is useful to find out how collaboration work, how books get put together because before this I have no idea about how these things come about. It's useful to see people who have already done it and they're used to it and they have lots of tips and advice, exchange ideas and I pick up a lot by kind of know it. So that's good.*

At the same time, members learned more about their area of research interest by picking the brains of those in the know. It is with these research groups that they learned the intricacies of research area. For example, some of the activities involved things that are quirky or things that members do not know at all. Yet, they find this valuable because these may be great ideas and innovative thoughts. Michael clarified that *"when I get to*

the forum I hear things that I might not know about. So it's educational in that sense"

and along the same line Chris mentioned that *"people may give presentations on things*

that I really know nothing about even though they might be notionally within my period.

I feel I'm learning something. I go to these things partly for learning and hearing it."

Andrew stated that

> in a wider sense I've been exposed to ideas, we don't know everything. I know a
> lot of things and a lot of papers but I write on subjects I know pretty well. You
> know, that in itself have been valuable. ... We all have something to give and take
> and start a discussion. For example, there was a phrase in one of the passages but
> I found very helpful very valuable. I am very alert to words and unusual terms or
> phrase and this is something that just struck me. I have not used it, I have not
> worked with it but this is how I accumulate ideas. I slot it away in my thinking and
> use it when needed.

In Andrew's example, it implied that members are aware that they do not know all

things and understand that knowledge in any one field is too complex for an individual

to master. They believed that these intellectual exchanges give them better grasp of their

research area and broadens their knowledge. In fact, they are learning and building up

knowledge. They may not have used it or worked on it immediately but this is how they

accumulate ideas, logically organise their nuggets of wisdom, slot it away in their

thinking and then making this knowledge available for future use.

Andrew's example also exemplified that learning in these research groups are both ways

where novices and experienced researcher learned from each other. In the example he

has quoted, he was referring to something a PG student has said. Andrew indicated that

he has learned from the new perspectives newcomers bring in to the discussions. He

noted that answering questions is a challenge and working through problems with others

helped to refine his thinking. Hence, by participating and helping others, it strengthened

his skills as it helped him build up old concepts and truly understand it.

Last but not least, members also expressed that through their participation they learn

about the academic profession. This means that these groups permit a newcomer or a

novice to the practice to be exposed to the academic community and providing them

opportunities to engage with members who are experienced. They see these groups as

an informal training ground, a way they can exercise and learn about their future career

before or when they step into the academia world. Lillian mentioned that

> *teaching is a thing that I have never done before whereas some of the other more*
> *established professors in the group would have done things like this before. I find*
> *it as a development, kind of exercising career development. It is useful. It's not*
> *meant to just helping me socialise effectively with both in my field and to get to*
> *know them and get to know how the academic environment operates when I'm bit*
> *of a novice. I need to be and it's a nice and informal way of doing that without any*
> *pressure on me. For example, when I graduate and if I get a job it's nice to have*
> *some practice at it or to be talked through it. That's very useful for me. I've never*
> *involved in anything like that. It's like a whole new ball game to me and I was*
> *fascinated by how people who had done it in the past were explaining and how it*
> *happened. I think it's a good learning experience.*

Above all, members indicated that participating in these research groups is important

because it provided them with tips or the tricks of trade and hands-on experience. They

pointed out that the information available in the community is up-to-date, not available

via other sources and would otherwise be impossible to find. Annie argued that

> *it's real, it is not theory, it's real stuff and problems. You know for example like*
> *put something in bid, what's the talk about when submitting a bid, oh this*
> *particular research council don't like this or this particular funding body don't*
> *like this, it's those stuff people would tell you. It was never written down. ... Tips*
> *as well and we learn from each other. We never write that stuff down anywhere*
> *because there's nowhere to write it. You don't write it in your final research*
> *report, you don't talk about in the conference. So it's all the things that people*
> *won't formalise but certainly share and that's why informal groups have far more*

advantages because we wouldn't minute things like that, we won't, it's not there, it's a conversation. That's why it's worth my time because I learn things in a situation like that. I couldn't possibly learn anywhere else.

In short, the comments above reflected that people found their participation worthwhile as these research groups facilitated them to enhance their own learning and self-efficacy. They noted that participation resulted in learning and keeping abreast with new ideas. However, one can argue that these can be learned elsewhere but members have clearly confirmed that what has been learned cannot be obtained elsewhere. Thus, this access to hands-on knowledge rather than static information is only available via these groups.

5.5.13 Foster tangible returns

Apart from learning, through combining their efforts, members felt that it helped to generate tangible returns. Becky revealed that

I think the interest was actually having a passion, talking about it and doing something with it and producing output, outputs that we're interested in which also obviously serve a wider agenda as well. It's a measure of something tangible out of that process because it will put the talking soft skill into practice by actually producing something than just talk about it.

These returns include publications, collaborations, access to useful information and expertise, solutions to specific questions and personal gain. Members found it valuable because it is something tangible that they can cherish or bring their research forward. Heidi specified that

I think having a structure [a research journey model] has been helpful to the group's thinking. We have a base from what we are working from and then to be able to use that in our practice. I find that very helpful. It's very concrete, very tangible and something that I can take away. I think for me that result is head on as well, that being very good and very key for me.

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In another example, Sally mentioned that *"I have had a chapter proposal which will be jointly written with two colleagues accepted and I would say that is the direct consequence of being a member in that CoP"* whereas Scott explained that *"our project is like putting a book together, a book of essays and that would be one of the output that we would want from this, by five people who are the core of the project and possibly one or two students who finished by then."* These comments indicated that members were more productive in their research and the meetings were not merely discussions but actions are taken to actually put ideas into producing tangible returns.

5.5.14 Drive research

From the findings so far, it is becoming increasingly clear that participation in these research-based groups has helped drive individual's research. Annie testified that

> *What a community like that does is it sets me deadlines that I wouldn't set myself normally for doing it, for talking about it and be involved in it. If I have regular meeting set I fit them in, I make time. I am trying to imagine life without the group because to be in a position where it was personal research, there's nothing else driving it, it would be easy to just let it fall at the end. It would be so easy to let it drift into the background. So although it's a relatively informal group, it actually formalises my research responsibilities, formalise my own research fore steps.*

This means that in the group, they set deadlines for each other and other members will keep them on track and they are more self-disciplined in terms of doing research. They would set time for meetings and put things into action to avoid feeling bad. This has pushed research as a higher priority in terms of what they do. Becky revealed that

> *the reason why I choose to research with people who are good organisers and deadline pushers is because I'm not (smiled) and I know that. So it's been really useful to work with [Sally] and [someone]. They are good organisers and they'll keep me and they'll tell me and I need that as well. I thought that was helpful. I'll try, otherwise I'll feel guilty for that and it will kick me into action.*

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In terms of Gail, she is not affiliated to any institution, she acknowledged that

I'm completely kind of self-motivated and nobody's going to tell me off if I don't do anything (laughed). So I find it very useful to have things like that to get myself organised and write something. For me, it's ideal really. I need deadlines and I need aims and it gave me that and it made me read a lot more than I would have done in the time and they put together a brief. It's very valuable to me, it makes me work (laughed). I think without the group, it gets very hard to work on my own.

In addition, members also expressed that going for these meetings permitted them to fully concentrate and think about research instead of writing bits. Daniel commented that

It's just that the entire day gets me in a sort of frame of mind to be thinking about my research continuously over an afternoon rather than having it broken up into snippets of my research when I'm wrestling with the bureaucracy and the day to day grind of working here.

In fact, it is their time out from the daily business and routine. It is a protected time to be involved in research, doing what they enjoy and forget about their formal work temporarily. In Ashley's case, she confirmed that

it's the time for me that's protected. I have this time and I meet up. I can leave the other stuff behind as I walk through the door and for that time I'm just going to be talking about research. That's because the focus of that meeting is purely about some research that we're working on and I don't have to take all the other aspects of my job there. For me that's really a good feeling to have that kind of time.

This is valuable because it is time allocated solely to talk about research. Pauline mentioned that *"one of the benefits of participation is the time out from the grind of academic work, to think creatively and to talk to others who are interested in research."* Moreover, it is time put aside to pursue academic or intellectual activities. Emma claimed that *"by attending the meetings, I take time out of my working day to pursue the intellectual activity of being an academic"* whereas Sally mentioned that

I see this as a forum where I can discuss my own research ideas and have them listen to me empathetically (laughed) and also it has helped provided with a focus

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because one member of our group has encouraged us to actually work together and to produce paper together. It almost pushed me into a position whereby the opportunity was created for me to actually begin to undertake research. It is a forum that enables people to at least periodically give focus to their research. When we are pulled in quite a number of directions and we have to undertake a range of activities and research naturally cannot always be at the forefront of our mind but the forum does give us the opportunity.

In addition, the ongoing activity has facilitated members to be in contact with other researchers, to keep getting at doing research, thereby keeping them research active. Susan confirmed that *"it helps to keep me active, research wise and having that contact with colleagues who are working in similar areas give me the incentive that I need to keep myself active."*

The examples above show that members can fully concentrate and talk about research because these groups created a place to talk and discuss about research continuously with a focus since they have usually come together for a purpose or a common interest. This also means that participating in these research groups has motivated them to be more research active and to put research at the forefront. This is valuable as most of the time members found difficulties to commit time to research activities due to their teaching and managerial commitments, not to mention the time they spent in consulting and other activities. Joining these research communities has helped to put research at the forefront instead of at the back of their mind because the meetings and activities allowed them to set themselves research deadlines, to focus on it and to do it. Members indicated that it would be otherwise if they were on their own.

5.5.15 Opportunity to meet

From what was said above, there need to be opportunities for individuals to meet to talk about research. Otherwise, it would be difficult for them to challenge each other's ideas and to build relationships. Andrew commented that *"we see each other more because of the group and that, in practical terms allows us to say we've got to talk about such and such."* Hence, the group is their meeting point and the meetings are important for getting together, to meet each other for that relationship to flourish. Roy affirmed that

> it [their research proposal] probably wouldn't have happened without the group because Andrew and I wouldn't see so much of each other. There is often not an opportunity for people in the different universities to meet or do anything collaboratively. We wouldn't have the same point of contact if we didn't meet through the group. It wouldn't have happened without the forum and we wouldn't have had such close contacts.

Besides, the main reason members joined the group is because they found it to be an invaluable medium with which they can collaborate and it created an opportunity for such a meeting of minds to occur. Emma asserted that

> the strength of the group, the positive way in which we interact comes from the constant meetings. It is the fact that we can and did it all the time. It's the fact that we had the conversations ongoing. I can sit with people and have an idea and then discuss it. It's an ongoing activity of being part of the research community that makes it rich. It's able to meet all the time, it's the constant iteration on ideas, it's a constant analysis of our surrounding that brings good research.

As a result, it is apparent that individuals need to have a forum to talk about research and these research groups created this opportunity for members to meet on an ongoing basis, especially those with common interest. Members found these meetings valuable because they might know each other but they may not have the chance to meet periodically. In other words, these research groups bring everyone together physically

and this is valuable because most social interaction occurs during the meeting. If they did not have the meetings, they would really be disconnected.

5.5.16 Networking, information sharing and updates

By given an opportunity to meet, members can socialise and build relationship. Most participants emphasised the importance of networking in one way or another. They mentioned that it is important, not to say crucial, to be part of a network, know people in their own field and communicate with them. In other words, it is getting in touch with their professional community. Lillian asserted that *"it is helpful in terms of getting to know other people in the field, being introduced to a circle of experts who might otherwise not meet."* Confirming Lillian's assertion, Daniel spoke that *"it's always good in an informal sense of networking to forge closer links with academics who are working in my area. The group facilitates that."* Similarly, Michael confirmed that participating in these research groups is *"a way of meeting the people who are working in my field in this area. I was pleased to meet some people whose names I have heard but who I've never actually met before. I was pleased to see some of the PG student working in that field."* From a student's perspective, Julia admitted that participation has allowed her to *"broaden my acquaintance within the sort of PG-academic community. It's also to see what other people are doing and to meet other people engaged in my particular field."*

Members see this as vital because it is a way to getting to know each other better, both conceptually and professionally. Karen conveyed that

it [the group] has improved relationships between the clinicians and the universities. It think it matters that we come together as a group and we try to get a network going and I think that's valuable. It's good that we share ideas. I think it's good to know how other people think and how the processes work.

Through these networking, members are aware and are familiar with each other as they know what each other is working on and what their area of interest is. These familiarities give members an idea of who is doing what and knowing who to ask when they have got an idea or a problem. Leah commented that

it's a good way of keeping in touch with colleagues in the [school] who were doing research. I get benefit from being exposed to colleagues who are researching but also them knowing that I am in that field too. It's something about being able to communicate across the organisation. ... I've got more of an idea of people in the [school] who will be receptive to talk about research, who understand what it's about and have had their own experience of it.

Annie reinforced by saying:

as a group I know who the members are and if I want to have conversations with one of the group, I do that. We all work in a group and we know who to talk to and we also know each other, what we're about and what we're into. So I know who to ask when I've got an idea.

These networks enabled members to link up their work and to foster possible collaborations. By knowing what each other is about, they keep each other in mind and there is a common feeling that these networks can lead them to collaborative work in future. Andrew commented that *"I've met people there whom I would bear in mind for a number of things. I might want to do something on such and such, I might ask someone from the forum."* Similarly, Pauline expressed that *"I feel confidence that those people in practice that I have worked with would call on me if they had an idea for research or an opportunity for funding."* In another example, Michael explained that *"I can establish links that will flourish in other project that we undertake together or I can*

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invite them to another kind of event that is happening." Correspondingly Joy exemplified that

> *I am opened up to the broader research area of interest to people like Don and Macy. Previously I used to work with Macy but she did notice Don and he isn't somebody I would have known particularly on my path. I see a wider perspective and if other things come up, there's a potential to make connections. I know where there are people who might be interested if we have a broader bid. So it's about networking and knowing new people being in such community. It cemented very good relationship amongst other people.*

Joy's example signifies that if there is not an opportunity to collaborate at the moment, members can point each other to the right direction as each has their respective networks. As stated by Mark, *"people have their own networks of people, so you reach other contacts."* In this way, members are able to tap in into other networks and at the same time extend their networks to get to know more people. This created a web of relationships and enabled members to contact and communicate with a wider network to develop their research. Alicia illustrated that

> *it leads to possible networks. It's extending my networks and I made use of a lot of those links to the literature and to other people. These networks are places to growth for me. It was networking between academic and clinical colleagues, networking across discipline, occupational therapy and physiotherapy. It was inter-disciplinary, academic and clinical.*

Likewise, Don pointed out that

> *it's an opportunity for me to widen my network. I ran a recent conference and there I can tap into people that Lily knows to help with the conference and to be able to talk about it anyway. So that is important and kind of personal value to be extracted from that network.*

Thus, networking is essential to keep members connected and is doors to other opportunities. Members claimed that it is imperative to be linked to these networks since many things in the academic world happen by chance. They see these research

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groups as places to socialise and as they meet and talk, it facilitated connections among people and ideas, while providing rich social environments for members. Gail illustrated that

> it has been really a valuable way of meeting other people, seeing what people are doing. It has given me contact with people in the same area so people start say things like oh are you coming to the conference or maybe you'll be interested in giving a paper all that sort of thing. There's so many things in the academic world happened by chance. When we have the chat during the coffee break, that's when you thought oh you're working on that and do you know about this. It gives you all sorts of contacts and leads. It has been my main point of contact to the professional world.

Don had an experience that echoed Gail's. He quoted an example to share his sentiments

> it gives me a chance to network and to identify publication opportunity. For example, Lily is the editor of a journal and she invited me to submit a recent paper into that journal. So it's an internal connection which is very helpful which by not belonging in that group I wouldn't have that possibility. ... I don't think you have much chance without belonging to something like this. It's often the case of knowing individuals and contacts to increase your chance. It's sad but life isn't just totally meritocracy. It's actually social networks as well as the meritocracy. I guess it taps you into that kind of network. So it's very, very important.

Apart from professional relationships, these networks fostered personal relationships. The social interaction occurred on both a personal and professional level and among all members. This is evidenced when the researcher observed during their meetings as it is noticed that members talked about work or research as well as their personal lives e.g. their families and friends. In the interview, Susan asserted that "I think the benefit is in terms of having friends who are friends from work who are not only in a professional capacity but personal capacity as well." On the other hand, on a professional level, they talked about research and work. Members felt that communicating on the personal level facilitated their working relationship. Pauline claimed that

it has helped me to develop networks and relationships with people that will continue to exist even after the group ends which help me to fulfil my job. I have also made friends in the group and people I see that I have seen out of work situation and kept in contact with which is nice

Moreover, since members are not bound by hierarchies and together with the informal environment, members felt comfortable to talk and this created an opportunity for them to build and cement relationships. This led members to know each other at better length and not only for what they do in their research. They can chat on professional as well as personal matters. Lillian illustrated that

> *it is nice to get to know people on a more informal level so I talk about whether they live in Newcastle, do they have children, have they got a flat renting and that kind of things and that in itself is nice because it helps me get to know people as individuals and not just by their work. When you are an academia you tend to know people you can spot and you'll say ah you are an English expert in the 18th or 19th century but you won't know whether they are married or had children. So it's nice to get to know people on that length.*

Whereas, in cases where individuals who have newly joined an institution or are new in the city, it is an option or venue for them to blend into the community and to mix around because it is informal. As Susan commented, "*personally, it was a way of making friends when I arrived in a new city to start work.*" As they interact, they connected at different levels and this increased people's openness because they get to know each other better. Furthermore it breaks down barriers between departments and various levels of positions. Peggy noted that

> *I think this social with colleagues, I can talk to [another member in the group] now but I couldn't before because I have only met him formally and now I know him a bit better and we can have a bit of a joke and when we meet to discuss more formal things, it is now a different thing.*

Apart from building relationships, through these networks, members also shared relevant information and got updated information which is of interest to them. When the researcher observed these research groups' meetings, she found that they were key places for discussing and exchanging resources. For example, a number of resources were presented, shared and explained or recommended. Members found this information handy because they are appropriate and practical since the group knows what each other is about and what is worth sharing. Such interactions helped members manage information overload and get relevant information. From the interviews, members indicated that the membership has enabled them to be more resourceful and they gained access to information. For instance, members shared information about their teaching as well as their research. This permitted members to draw information from different sources. Leah confirmed that *"people have circulated references or papers on a particular topic which really benefits me because at that time I was writing about it"* and Becky further affirmed that

> we pass on information sources to each other. We do pass on kind of course
> information or when I came across this website on all these literature about
> [Sally's research]... because I knew Sally and what she is doing, I pass on the
> information to her.

Additionally, the exchange is valuable because members considered the information to be updated. They believed this type of discussion keep them abreast of leading thoughts, techniques or tools and hear the latest "professional" gossip. They felt that to keep current on new ideas and issues in their respective field or their professional community is important. Annie, who is not research active at the moment, mentioned that *"I still want to know what people are doing. I still want to know what's out there, what's going on and what people's interests are. It keeps me up to date with what is*

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going on. " Julia who shares Annie's thoughts commented that *"I just like the opportunity to once a while hear about some other work that is going on especially in my field"* and Rachel confirmed that the group is a *"useful place to get a sense of what is going on in various fields, whatever the topic happens to be. I get a good overview and the sense of where the debates are coming from or where they're going"* and Pauline indicated that *"I learn particularly from those in clinical practice about what the important agendas are. I have personally got a lot out of that in terms of keeping up to date. "* In terms of Gail, who has been out of contact with people for a while, she admitted that *"I worried that I was out of date for not doing anything for a few years. I've lost touch of where the cutting edge in research was and what people were talking about now. So I joined partly for that. "*

Also, members can be acquainted with information pertaining to upcoming conferences or call for papers. They tell each other about relevant conferences or share information on the conference that they have attended. Chris confirmed that *"occasionally I find out that people are doing things but I didn't know about. For example, I had a chat with Michael and knew he organises the [annual conference] that I used to go a lot. It's interesting to just catch up. "* Karen explained that *"we give information about what's happening within our [institutions] with regards to research, structure within it for supporting allied health professionals with regards to research"* and Lily denoted that *"when we meet there's always an update on activities and who's doing what.* Through these sharing of information, members have a fuller view of what is going on among them and can know what resources are available. This way they can help and support each other. Joy claimed that *"we share a lot of information that no one person in that*

group has the whole picture of what's going on and use some other people within the

school, so each in the group brings news about something what's happening."

Therefore, these networks have helped members developed relationships professionally as well as personally, between different institutions or practices. It enabled newcomers and senior members to participate in their professional community and to know each other better, and this has helped to cement relationship and created collaboration and other opportunities between them by pointing each other to relevant networks. When exchanging information, members also shared information about what is going on in their respective workplace. This gave one another a better understanding of the environment they are operating in or the environment each is going through.

5.5.17 Support and guidance

By keeping themselves updated about each other and also about their research, members can support and facilitate each other in many ways to achieve their aspirations. As evidenced above, these research groups gave them a chance to get help with specific problems, to learn what others are discovering and to explore new ideas. There are many facets as to what members consider useful, for example, actually receiving help when seeking advice or the information provided is valuable. In the case of the two examples below, Susan and Rachel have received support and guidance when seeking advice from the group and the suggestions provided are valuable to help them further improve their bid for grants and to bring their research forward.

> *Susan: We talk about what we are working on, whether what sort of things we hope to achieve and how we can help each other and make sure we achieve those things. We support each other in relation to how I put in a bid for funding. Vivien*

had already had one and she was able to help me by looking at my bid and help to work that out into a good bid. Well I wrote the bid and then she read it for me, made a difference on how I can improve it. It's been supportive.

Rachel: Last year I applied for [a grant] which is a very long and ponderous kind of document. Vivien has already successfully got [a similar grant] a couple of years ago. So one of the things I did was that I circulated my statement to Vivien, to Susan and also to Hazel for them to look at, so that kind of support and more of kind of concrete professional aspect of it. I just get a sense of mutual support in that sense and I am not on my own.

Elsewhere, Sally mentioned that the group has not only helped in her research but it supported her in terms of the process as well, *"the group has support me not only in research, in this case writing research but it supported me in the process as well."* This is true because at times, there are ups and downs in doing research. Ever so often members may be plagued by project or funding problems, for example. They can feel down, disappointed or wanting to give up. They needed help, advice or somebody to talk to and members have stated that there has been mutual and moral support in the group. They found these help pertinent because it helped them through the low time and through receiving these support they are able to turn around the situation and to make the best out of it. This is exemplified in Ashley's excerpt below.

there was once we haven't got funding and the group went very low. It was disappointing because we put in time and a lot of work for bidding. If I've been on my own, it's quite easy to think well I haven't got any funding and may kind of leave it really because I've got to say I've got lots of other stuff to do but in a group you support each other to keep going forward. We then thought, so how we're going to use it, like a paper reflecting the process where we've been to. So in the group I can turn it into positive by supporting each other and keep moving forward as well.

Two other members in the group confirmed that

Heidi: we tried to turn that round and be positive and to see are there any solutions we can find for this rather than being always weigh down by the

negatives because there are so many negatives around and if we let those weigh us down, we never get anywhere but by turning that around and creating much more positive environment where we believe something can happen and we all have.

Pauline: I am a researcher and funding doesn't always come off. This type of group activities is bit of like relieve.

Other than problems in research, members also faced problems or stress from their workplace. They needed a place to moan or to let out frustration, like in the case of Vivien she disclosed that *"it becomes a way in which I can work through problems of frustration or my irritation with something going on at work and I just simply feel better about it"* whereas Stella emphasised that she can get some possible solutions. She stated

> *the other main thing that I do is I have a good moan, talking about things that constrain, the problems. That is part of it and I really do think that is an important thing to do. Often it's very focussed on a specific research idea, mostly about either school issues but also the national issues, [accreditation body] pressures or the pressures from the government, all those kinds of constraints that force me to do research in a way that I wouldn't necessary want to do if I was just led to do the research I want to do. So I actually let off steam and also in that process maybe I might find some ways of dealing with it a bit better with some ideas of how to circumvent it or whatever. I mean that is an important thing as well.*

As for Ashley, she seeks support and guidance to balance the role she plays in her institutions. She explained:

> *if you are leading it [the institution's research], it can be slightly isolating although I have colleagues within the service with me but the way people deal with me is kind of variable. So I go to the group and get the support for myself as an individual as well as a professional. It has enabled me to take on a different role within this group and that's really important. Otherwise it can become disparity in the workplace.*

At times, when telling others about their experiences, members also found support in the sense of finding out that they are not alone and are not the only one going through it. They felt a sense of relieve to know that others are going through the same experience

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and can exchange information to improve the situation. Stella admitted that *"to realise that those problems are shared and knowing that problem is experienced by other people it makes it slightly easier"* and similarly Heidi confirmed to say *"I think some of it is I know that I am not alone to experience it."* In Annie's case, she has not been attending the meeting for a while and there was one occasion when she turned up for a meeting, she confessed that

> *I felt rather guilty that I lack attendance but then it is informal and there was no reason to feel guilty but I did feel it and I went in and a few people started talking and all of a sudden I realise actually that it's not just me. Everybody lives like this. Everybody can't make it to every meeting. Everybody have to juggle things. This is life. This is the way it is. So, it is the general support and the general knowing that you are not the only person in this situation.*

Hence, as members shared and supported each other, they developed close relationships and collegiality between each other. They felt that these are friends they can call on when they have problems. Even though they work in their own projects in other divisions, these members are their real colleagues and they are just a phone call away. In fact, these are the people with whom they can discuss or trouble-shoot problems. Lilly illustrated that

> *the benefit that I've derived personally from the group is I'd say collegiality and it has really an underpinning supportive element. It's the support in terms of peer review, it's having the confidence to develop new ideas and sharing. It's researching in a supportive environment. I am surrounded by my peers who both support me as an individual but also have similar research notion to me and that I know that there are people there that I can either bounce ideas off if I want to or that I can put in a joint bid with and I mean people that I know where they are coming from really. It is the moral support of actually anything but practical support as well. If I got something that I want reading a bid for example you tell me what you think, I can go to someone in this group and they will give me an honest opinion but in the sense of being a critical friend rather than saying, that's rubbish, chuck it out the window. They will say, woh Lily that's absolutely rubbish but you know because of di da di da and I think you did da da da then you might then stand a better chance, it's that sort of thing.*

From Lily's example, it denoted that members usually go to the group to seek advice

and guidance since they know about the details of each other's work. Michael

confirmed that "*if I have something which I am writing about and when I need advice, I*

will contact them [the group] to get their advice." Members felt that people were

committed and ready to listen. Alicia confirmed that "*people are genuinely interested in*

my topic and there was a commitment to really listening and interacting." They further

noted that they would not hesitate and will automatically go to the group for support.

Hazel specifically said that "*I would always and automatically go to them [the group*

members] to read anything that I've written and to talk about what I've written. I

wouldn't go to anybody else"

This is because members felt comfortable sharing these experiences with the group and

they believed that this is a venue where they can talk about it. They assumed that others

understand their situation. Susan explained that "*the reason why the group is supportive*

is, as you know we all come from in some way or another, an approach informed by

feminism and it feels nice to have some female colleagues who share the same feminist

baptism in a good moment (laughed)." Another member, Hazel further commented that

> the fact that we support each other in doing what we do which is outside and
> different from everybody else does in terms of our approach, we are women
> supporting women, dealing with issues around women. It's somewhere we can
> support each other, confront each other. I think it's very positive and this is a
> particular place where I can feel that people understand what I'm doing.

Hazel's example shows that members seek support from the group because they see

members as friends that understand and have similar aspirations. When relating their

experiences to the group, they know that members can grasp and comprehend exactly

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what they are going through and how they felt. More importantly, they trust each other and believed that whatever they got to say is safe within the group. Vivien was eloquent in describing that

> *for me, it isn't an option. I cannot do without those occasions where we get together because I can't imagine not being able to talk about these range of things that we do talk about. I think I will get increasingly frustrated, angry and if I didn't have an outlet for these things, I will be unhappy, very unhappy. The thing is when I go home, I spend time with my family and I can't really talk about these things to family in the same way because they don't experience the department and obviously they know who I am talking about but they don't know who I am talking about the way my colleagues do. So bringing it home is not necessary the best thing to do, I don't think so. It's nice to take it somewhere else. ... I find it comfortable to relate to them [the members] and I trust them. It wouldn't work if I felt that my secrets weren't safe (laughed).*

Pauline echoed Vivien's opinions to say that

> *I have made friends in the group and people I see that I have seen out of work situation and kept in contact with which is nice and people who I have been able to call on for support, informal support if I have difficulty or things which I wasn't very sure of. The people that I have met through the group, I felt safe to approach and share my dilemmas, and that's been an important value.*

Lily's example also indicated that members are conscious that the group is not a forum to criticise but to challenge and to be constructive in a supportive way. Members noted that nobody is not out to boast and they are genuinely interested in what each got to say and try to encourage each other. Lillian testified that *"I have never experienced negative feeling in the group. People are very acutely aware that it's not a place in which they criticise. They not just reinforce things but ask questions in a polite and constructive manner."* Scott explained and confirmed that

> *everyone is generally asking questions on the basis of needing more knowledge about rather than to demonstrate their own cleverness. It's genuinely a friendly context to discuss things and develop. It's a much nicer way of discussing ideas because not all academics are trying to score points from each other (laughed). None of the people in this group are. Genuinely, they are trying to extend their*

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knowledge and they are genuinely interested in what people in the field have to say and they can alter the way they look after themselves.

These examples also implied that it is the quality of members that makes it different and supportive in the group. Leah described that

the biggest thing that has come out that has changed my perception is the quality of people there. On the first day I was there [in the group] I felt quite junior. Now I go along and I don't. I feel that whatever I have to say, whatever my experience is, is as equal as some of more experienced people and they are very supportive. There is a feel that you can table anything and any query you've got, any concern you've got, any idea you've got and people cannot accept it and critique it but in a very supportive way. It's a group of people that I can call on for support. Perhaps I wouldn't have done that if I were not part of the group. What I'm saying is that there is somebody who is incredibly keen, incredibly open and supportive.

Leah's comments indicated that the atmosphere is one that is equal and respectful where others have positive regard to individuals' contribution and were respectful of what everyone got to say. Members found this supportive because it creates an honest discussion within the group and without anyone dominating it. Heidi pointed out that

one of the advantages of that group is that no one had any management accountability over anybody else. We had a very flat structure, we were all equal, we all have something to contribute, we all have something to learn from each other and it was a very flat structure. It is a very level playing field and I thought the academics are respecting the experience we bring in health and health is respecting the academics input.

In the case of the EngLit Group, the academics and the PG students recognised one another as equals and there is no hierarchy of seniority. From an academic's perspective, Daniel stated that the group has helped to *"relax the distance between the professional academic and the PG student. They are working in an environment which is more friendly and receptive than the one which is forbiddingly hierarchical."* On the other hand, from the students' perspective, they did not feel intimidated, they felt

comfortable and it allowed them to see the human side of their supervisors or the senior

researchers. Julia and Lillian explained:

> *Julia: it gives me a good chance as a PG student to mix with academic staff and just become comfortable and to learn to just say my own ideas on a level of more equal exchange of ideas.*

> *Lillian: It's nice because it makes a kind of informal environment where all are treated equally. It made me more comfortable in a professional environment. ... There's less of hierarchy which me and like somebody who've got 20 years experience and yes that gradually helped me to find my feet in that kind of environment and to be able to express myself. I find that particularly as a PG student it helps me see these people not just kind of intimidating professors but more as human being, they have life outside academia and that bit helps me.*

In light of these comments, what is also evident is an apparent willingness of members,

especially the more senior researchers or senior staff to leave their turf, territory and

power behind in coming to the table. Like Becky related,

> *I think particularly the senior researchers, I mean there were great pain all the time to tell us that, because we kept saying we are novices and we're just getting to understand all of this and they were very out of their way to rubbish that idea and to say it's equal value here and I think that was really helpful.*

These examples have indicated that the senior researchers were supportive and provided

guidance to new researchers. This is valuable because novices can gain knowledge and

nurturance from more experienced researchers who are also knowledgeable in their area

of research. Furthermore it was asserted that experienced researchers were there to help

and support, and they are sincere and they respect what others have to say. Becky

further commented that

> *in the group there is a very clear sense of developing others and to having a forum based on equity, values and differences, and we are very keen to encourage everyone in the group really and I think when you have senior people in the group who from that point of view are more expert of what we're trying to do and their whole approach to it and the kind of values they have are really important. There*

was nothing that was not shareable. The senior researcher saw themselves bringing on other researchers within the school. It has got to do with their own values as a researcher and what they wanted to do with their research area and to facilitate that and to encourage one another.

Therefore, it appeared that members are altruistic and they shared almost anything with a sense to develop and to encourage, which is truly out of their passion and enthusiasm. Members have found support and guidance in terms of gaining help in applying for funding, in their research process, to go through the peaks and troughs of their research, to relieve them from the stress and frustration and in knowing that they are not alone. Through the support and guidance members get from the group, they felt that true friendship or collegial relationship is formed and they know that they have somebody to call on when they needed assistance.

5.5.18 Sense of belonging

Another reason members have participated is because they feel emotionally involved and engaged. There is a feeling of being connected and a feeling of community-ness, a sense of belonging. The feeling is that there is a fit between them, intermingling with members working in conjunction with each other. Members felt right, they felt good as they believe that they are in the right place. Andrew explained that

> *one significant value is community value in the sense that I know there are enthusiasm that correspond to my own intelligent articulate enthusiasm. It's the sense that other people are working alongside me and it's everything that goes with being part of the academic community, clearly the university and the north east university community. So, it's a research community that's dedicated to more or less what I do and have a grip on it.*

This sense of belonging gave members a feeling of having an 'intellectual home', knowing that they belong to a place where they can go to when they needed to talk or to

work things together. Don commented that *"it's beneficial in terms of having a home, somewhere to go to talk to people who are working in similar areas to you."*

Members felt happy and good belonging to these groups. They were in high spirits to contribute and to be successful. It is more about the group rather than themselves. Ashley mentioned that

> *it will be nice to do it [write a publication] with the group. It will be a process the group have gone through so it becomes a group, as a group who sit down and reflect on the journey that we've been through over the last four years. So, it'll be nice to do it in that forum and it's nice to do it with that group. It's more about the group actually than getting the publication.*

Macy further reinforced to say

> *being a member of this group, it gives me a sense of belonging and a sense of place. It also gives me the motivation to contribute and to be successful. Even though I am the only one involved in [my research] I'm still part of the community. Personally, that's a very satisfactory way to go on. I still have my own research but I'm also part of the team.*

The feeling of community-ness gave members a sense that people are there for them, people who are caring and committed. It is also having a place where people show their concern when member do not show up in meetings and they felt responsible for each other. Members indicated that they benefited from the attention given in the group. Annie expressed that

> *I'm not very or haven't been in the past few months very active in the research group simply because my [managerial] responsibility takes a hold back on that and it has been predominant. When that stops or slow down, I should say I will engage again but there's something to engage with but if I didn't have that I would have absolutely nothing. I have a group of people who expect me to be there, who would like me to be there, that you know they are there for you. I don't understand how people who are independent researchers function without a group.*

In another case, Alicia described that

I knew that other people would selflessly put their knowledge on the table. I knew that other people were making intense effort to get there. So my own effort was minimised by the fact that it was the same for everybody else. I knew that I got to go for people there, they're really making an effort to get there. That's important to them as well as to me.

For individuals like Michael and Susan, who have just arrived at the city and started work in their universities, being in the community made them felt welcomed and they felt great to know that there is a community of people whose research are connected to them. They felt welcomed and felt accepted by peers. For them, it is a way to make friends and to belong to a group. Michael shares his feelings to say that *"it [the group] helps me to feel at home here and to know that there is a community of people who are interested in similar thing to me. I'm sure we get to organise things together or work something together"* and Susan commented that *"it was a way of making friends and it's nice to be asked to join when I first arrived, that made me feel very welcome at [the university], that my research connected with other people in my division."*

Therefore, being a member of these research groups gave individuals a sense of belonging where they felt the community-ness of participating with a group of people whose work are interconnected with each other. They care for each other and it is more about the group than themselves.

5.5.19 Identity

Given the community-ness, individuals therefore have a great deal of their professional identity tied up in their communities. Apart from giving them a sense of place, these

groups offered to members a sense of who they are. Macy claimed that *"by being a member of this group, it gives me a sense of who I am in that group."* Members felt that this is important both personally and professionally. They indicated that by participating in these groups, members see themselves as academics doing intellectual work. They felt more of an academic rather than a lecturer or teacher. Becky affirmed that

> *I get a real sense of how it feels to be an academic in those kinds of meetings, an academic that is all about exploring knowledge and sharing knowledge and creating knowledge. I think the big hook for me in the forum is I get a very strong sense of myself as an academic.*

In addition, by joining these groups, they realised that they are building their identity as a researcher and raising their research profile in their institution. Don confirmed that *"it has enabled me to raise my profile in the university."* They construct an image, label themselves and developed a sense of themselves as researchers. In Emma's case, she wanted to be recognised for what she has done and more importantly, building an identity of how she wanted others to see her.

> *I'm looking for recognition for my abilities. Part of my measure of who I am as a person, comes from my professional recognition within my working environment. I want to be seen as somebody who is research active, who makes a valuable contribution to the school on the count of that activity [joining the group]. So research profile is important to me, I don't want to be seen as an administrator or a manager or a teacher but I want to be set in somebody's head as being a researcher because that's why I'm an academic.*

From the perspective of novice researchers, they mentioned that as they participate in the group, they found that they are more able to contribute and start to have a different view of their research capacity, thereby forming their identity as a researcher. Lillian commented that *"I felt a bit able more to contribute to the discussion on what's going*

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on. Instead of sitting listening I gradually become part of the discussion myself" and

Sally further elaborated to confirm that

> *I have had a change in my views towards research in my own capability as a researcher. At the time I join the CoP, I would have said that I was a non active researcher. Now, I would maybe re-label myself and I would say that I am a novice researcher. So I am now accepting the idea that I do undertake research and I do have an emerging research profile within the organisation.*

Another value of participation is that members wanted to be identified as an individuals attached to a research group. It gives them some representation or status by identifying themselves with the community. Rachel asserted that *"having a title and having a research group gives you an identity."* Lily stressed that

> *it gives me a foundation on which I go out and be representative and I am representing a body of knowledge and thought that exist within [the university]. So it has momentum about it. Then you represent that more widely in the professional community by taking part on these different committees and activities.*

Don claimed that it gives a focal point for introduction and to act within a label.

> *it looks better externally if I can say I belong to a research group. It gives a sense of more focus, ok so what do you do, oh I belong to this group, oh that group does all these activities and therefore my implications are in these activities. So I have the power of the group behind me and I can act within some kind of organisation umbrella.*

Whereas, Stella said it branded her.

> *it gives me focus in my research and I think it give me status. I'm not just on my own, I have a function, I have a role, I'm part of this group that try to take on the wider research agenda in my area. I think it's being able to when I send out my emails, all my communications I say I am in this group. So I'm just not a researcher in the school, to the outside world I am a member of [the group]. So it brands me.*

Hence, participating in these research groups gave members a sense of identity of how they see themselves as an academic as well as a researcher and at different stages of

their membership the see an emerging identity thereby re-labelling themselves. This helped to raise their personal profile as well as their professional profile and by attaching to a research group, it brands them.

5.5.20 Intrinsic fulfilment

Ultimately, the quality and the value of the collective experience of participating in these research-based communities depend on how fulfilled and satisfied members felt. This refers to the intrinsic rewards members believed they have obtained from their membership. Members mentioned that when participating in these groups, they can pursue what they are passionate about. With a group of like-minded people, the group enabled them to exercise their enthusiasm or to pursue their dream. Peggy mentioned that *"in the group, I am looking at developing research and that's what I am looking and would like to do"* and Heidi asserted that *"don't call this stupidity (laughed). I think it's the desire to make a difference in terms of allied health professional research and the feeling that there was something about meeting together and to continue with a new sense."* In the case of Karen, she affirmed that

> *it was the expectation that we could promote research within the allied health professionals. I'm not really sure whether we've achieved our aims or whether I've achieved my aims but I still think that if I don't keep trying I'm never going to get anywhere. I have to keep going and trying to promote research and research ideas within the profession, within the area of my work.*

There are also members who have taken part because they are strongly interested in a problem or a topic and would like to discuss it with others. The zeal and keenness about the topic energise them and they inspire each other. This is rewarding in the sense of personal worth and ability that is fundamental to their identity. Becky commented that

in the group, the academic interest is so strong and it is passion for me and these things are really things that I spent time to read about. There's a genuine passion about the subject and with genuine enthusiasm and there's a general feeling of individuals wanting to be there themselves who want to grow intellectually. There was a real energy and a real enthusiasm and it was great. When I'm in a group with other people who are really enthusiastic and challenging and full of energy, it fills me with energy. It's an intrinsic payback around a feeling of value and self-worth and more I think about the sense of being an academic.

This also means that by participating in these groups, members can discharge their professionalism or uphold their professional integrity. Members mentioned that it enabled them to fulfil their sense of duties and responsibilities as academics. They felt that it is their sense of duty and it is the right thing to do. Andrew remarked that it is *"taking one's position in an academic community."* Don explained that *"it's my responsibility as a lead researcher to help others. So it is a belief that this is the right thing to do and I am interested in it."* In another example, Michael expressed that

it's part of the academic life so it's something I would have done and always expected to do. Partly for my own benefit but it's also for the benefit of the students who we supervise together and for the benefit of the community of people working in this field. It's partly because of enthusiasm and partly the determination to provide the best service for students. So partly it's the duty and it's necessary and partly I would say it's the pleasure and I'm very happy to do.

From the above, it is also evident that people find it intrinsically fulfilling when they are able to help others. They felt good knowing that their contributions are of value. Pauline explained that *"I have an opportunity to prove myself to be useful, to be of help and advise. It's the feel good factor of being involved with a set of like-minded people where my contribution is valued and I value the contribution of others."* They participated in the community because they enjoyed learning and sharing with others. This enabled members to help themselves as well as empower others to help themselves. In this way, they can use their capabilities to the fullest. Don expressed that

there are more junior people in this group as well as senior core members. So by having that group we can help them learn, move them up a level professionally and move ourselves up organisationally so we could all gain if we put something into it and I like doing it.

Above all, members found their participation worthwhile as they felt that it is something nice to do and they enjoyed doing it. Some the examples are presented below.

Andrew: Well, honestly I enjoy it. I enjoy the company, the stimulation and the academic exchange. If I hated it (laughed) or maybe I would not be enthusiastic about doing it perhaps it wouldn't have got that far.

Chris: I am there to join in really and it's just my personal enjoyment. It's just the pleasure of feeling it and talking about my subject and people are also interested in my period. I would feel quite bad about for not going to this forum and as it happens I also enjoyed it.

Daniel: It was kind of a beau moment for me. So I go because I enjoy the day as an entire experience. It's more of a good feeling about the research.

Lily: Well, very often I wonder about myself (laughed) frequently. I like it [the group], I like doing research, I think it's the most interesting that I do. It's personally fulfilling.

These comments reflected that participation in the community is fun and members have done it for enjoyment as they are able to pursue what they are passionate about, they are more keen and inspired in their research, they are able to help others as well as to be able to exercise their professionalism and professional integrity.

5.5.21 Impact of membership

From all the perceived values mentioned above, it can be seen that there are many aspects of how the membership in these research-based groups have affected individuals. One of the impacts mentioned by participants is that professionally, there

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are opportunities for professional or career development. As Don related, by facilitating others it assisted him to do his job and he mentioned that "*it helped me move myself up organisationally*". Chris even commented that "*it pays to be in one of these groups because it opens up professional opportunities such as possible employment.*" This is because through the groups' activities, they are linked into a network which opened up different aspects of career opportunities. Chris further mentioned that "*I may meet people from other universities who may become my employers.*" Likewise, Susan who is at the early stage of her career, stated that "*it is important if I want to get a promotion or another job because I'm not going to be in this job forever.*"

Also, since joining a research community is seen as something desirable, it has helped built individuals' profile especially when it comes to reporting their involvement in research and its activities. Andrew explained that "*it can help me fill in some boxes.*" On a different vein, when applying for a job, Lillian mentioned that "*I am telling about that group in my CV, evidence that I participate actively in the academic community. I think people like to see so that's useful and it kind of broadens my horizon as potential academic really.*" In light of these comments, members believed that the community is an important resource to enhance standing in the profession and to establish a reputation that will hopefully translate into a job. This shows that individuals have received some sort of personal gain or status related to their professional position and participating in these groups are seen as building block towards their career, their identity or their profiles in the institution.

In addition, members indicated that they participated in the community due to moral and professional obligation toward their subject area or discipline. They noted that it is their sense of duty and taking their place in the professional community. Andrew said that *"it is taking one's position in an academic community."* By joining they are part of the community, otherwise, it seems peculiar if they are not part of the community. For example, Chris commented that

> *in a region like we have with a relatively small number of universities, then it looks odd if you are not there if you are in the 18th century specialist because I'm a member of the organisation which is of the 18th century and I'm in the romantics as well so it will look weird if I wasn't there. It's the career profession thing but it's also a sense of responsibility to my subject area, to my interest.*

Also, participating in these groups has helped them perform their roles and obligations in their formal workplace i.e. teaching, managerial responsibilities and etc. Sally mentioned that her participation has given her an understanding of the meaning of CoPs and now when she is talking about CoPs she said: *"I can actually give examples of CoPs that I am one of and how they have been used within this organisation and the benefits to me."* Scott mentioned that joining a CoP has helped flesh out his understanding of the general period and it gives him a broader context for discussion when teaching. He emphasised that *"when I am teaching I drive on a wide range of knowledge that I have and this group helped me to keep getting at it."* In another example, Pauline noted that *"it's important for me to demonstrate in my role that I have proper connections with practice, proper networks, collaborations and it [this group] has enabled me to do that. It has also enabled me to develop useful practices that are beneficial for students' research."* From what has been said, this proved that just by being involved and providing well thought out ideas members built their credibility which enabled them to

fulfil their professional responsibilities. In addition, these quotes also implied intellectual impact where members learned or increased their knowledge.

This led to members finding their work to be more meaningful, not only in research but also in their formal workplace and this is key for individuals as Emma stated, *"I spend a significant proportion of my adult life in my working environment ... being part of the group have made my working life worth having and I am able to achieve a work life balance."* Members noted that it has increased their self-esteem and has enabled them to gain recognition for their abilities. They found work to be more exciting and they learned to enjoy work and this shows that work is not only as the primary source of income but it is also as a base for social participation and social status.

Another impact that members have mentioned is that participating in these research-based communities has impacted them personally. One of the most prominent impacts of participation is, most members have indicated that it has made them felt more confident in their expertise. For instance, Joy mentioned: *"the group gives me confidence for my research."* It was also indicated that they felt more confident personally when they are able to prove and establish themselves as they join the group. Stella said *"I get more confidence of being one among peers, a kind of confidence that they [the members] start to accept me. They get to know me and realise that I can deliver."* In the case of Gail, being on her own, not affiliated to any institution at the moment, joining the group has increased her confidence as she commented that *"when I went to the first meeting I was very nervous because I haven't been doing thing like that for a very long time but I'm getting a little bit more confident now."*

From these examples, it has clearly proven that members felt that joining these research groups has increased their confidence in their expertise and of their well-being. As members participate in these groups they gradually become part of the discussion and because they are in an informal and supportive setting, it has helped them to find their feet in that kind of environment and to be able to put across their views. Lillian noted that *"I've noticed particularly in the last meeting that I felt a bit able more to contribute to the discussion instead of sitting and listening."* This enhanced their self-respect and self-worth as indicated by Gail, *"it's good for my self-esteem and how I feel about the work I'm doing."*

Through the increased level of confidence members also discovered that it has helped boost their personal motivation in terms of doing research. Joy mentioned that *"the group has kept me going and pushing for my research."* Members have expressed that they desired to do some research but did not have the confidence or the time to do it. It has been kept behind their mind most of the time. However, they indicated that since joining this group, they felt more motivated towards doing research and are more confident to do it along with somebody. Heidi confessed that

> *I haven't done anything since my [Masters]. This is the first one and the only bit of research that I have done and I think that's what ties in a little bit with wanting to do more but not always having the confidence to do it even though I have done masters and wanting to kind of just hang on or going into somebody's straight stream. The group has given me the confidence to fly on somebody else's shirt tail (laughed) that I benefit from somebody who has more experience than me who's taking the lead and I could go into their straight stream. They create a straight stream and I can go with that. It's around confidence and if I don't capitalise on my masters in terms of my research confidence and competence, it just slip down and I lose confidence and then that's when I need to work along somebody else.*

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Heidi's example exemplified that members are more high spirited when there is somebody to 'hold their hands' in their journey. They encourage and support each other and this has been important for them personally. Essentially, with the increased motivation and confidence members can realise fully their own potential, thereby instilling the feeling of self-actualisation.

Last but not least, members have indicated that they have been impact socially because by meeting and spending time with each other, they have formed close friendship. They have made new friends from these groups and they are friends both professionally and personally as they see them at work and also out of work. Emma mentioned that *"some of my best friends come from this group"* while Andrew said *"I've made some new friends through it, both from the staff and on the student side and that's very good and I could imagine some will remain friends even when they leave Newcastle and go off to do whatever they do."* Members also expressed that they are happier and they treasure these relationships because as Alicia commented *"these are people whom I have shared and they are people whose insights I value enormously."* Hence, these research-based communities are seen as places to develop and extend friendships because they can have conversation which is partly professional, partly intellectual, partly social and partly personal. It is all mixed in together and members find it more relaxing and they can have a variety of conversations to know each other better.

5.6   SUMMARY OF FINDINGS

In summary, during the interviews, without fail, members perceived that their participation in these research-based communities to be of value. Some even mentioned

that they do not know what to do if they are not attached to any of these research groups.

All twenty values that are identified in the course of this study are listed in Table 5.3.

Individuals' Perceived Values of Research-Based CoPs			
1. Autonomy and freedom to think beyond	6. Alternative perspective and cross pollination of ideas	11. Time and energy saving	16. Networking, information sharing and updates
2. Sources to ideas	7. Overcoming intellectual isolation	12. An informal ground for learning and training	17. Support and guidance
3. Sounding board	8. Move towards collaborative research	13. Foster tangible returns	18. Sense of belonging
4. Intellectual discussion	9. Response to research pressure	14. Drive research	19. Identity
5. Like-mindedness	10. Synergy and leverage	15. Opportunity to meet	20. Intrinsic fulfilment

Table 5.3: List of Perceived Values

In their stories, members have indicated that these values have impacted them professionally, personally, intellectually and socially. As far as the researcher is concerned, these are remarkable findings and the next chapter will use a more holistic approach to discuss the relationship between the values and will study these values more in-depth, interpreting these findings and explicating its significance in the HE environment.

CHAPTER 6

DISCUSSION

6.1   INTRODUCTION

This chapter will provide a synthesis of the entire study using a more holistic approach, discussing the twenty perceived values in detail, in an inter-related manner. More specifically, it discusses the findings in the light of the research question in connection with individual's perceived value and impact of research-based groups, relating it to HE and past research. Therefore, this chapter provides an explanation of the findings, going beyond the surface level to explicate and interpret the underlying meaning of the perceived values and how it helped in doing research in the HE environment.

6.2   DISCUSSION OF FINDINGS

As of the groups' and individuals' profile, it can be seen that members are made up of different disciplines and backgrounds, ranging from the very historical to the innovative technologies. There is a good mix of professionals consisting of academics, research associates, PG students and practitioners. In addition, it involved individuals from varying levels of experiences and status in institutions e.g. senior researchers, novices, students. Most of all, these groups and individuals have come together for the purpose of doing research and they are from different divisions or institutions, giving diversity to the situation and context under study. This also enabled comparison, to draw out the similarities and its distinguishing features. From the groups' profiles, they revealed that

there were marked differences and commonality between the five research-based groups with respect to their structure, their characteristics as well as their activities. Overall, the researcher believed that the research groups and the individuals selected for this study are appropriate because conceptually it fits into the profile of CoPs and have practical features that provided rich data for the purpose of this study.

Based on the results, generally, members did not know or expect these values when they first join the research groups and it is through participation and their retrospective reflection that they realised and recognised its values and impact. This is consistent with what different authors have said in the literature chapter, Section 2.3.4 that participation is necessary to appropriate the value of membership. Therefore, it was on the basis of try and see what happens that they made sense of their experience. This is also consistent with the perceived value in the marketing perspective (stated by Payne *et al.*, 1998 in Section 2.4.3) as it posits that it is upon consumption (participation) that customers (members) are satisfied when it is functional to satisfy their need (help them in their research). As well, this is in line with the philosophy of this research i.e. social constructionism where individuals make sense and construct meaning as they interact with others (as mentioned by various authors in Section 3.2.2), and with one of the central tenets of the CoP framework i.e. reflective practice (mentioned by Fenichel, 1991 in Section 2.3.2.2) where members step back to consider the values and principles underlying their participation.

In total, this research has discovered twenty perceived values of research-based CoPs' membership and they have impact members in their own ways as each value them

differently because value is like beauty and it lies in the eyes of its beholder (as mentioned by Danner, 1981; Konrath, 2003 and Regebro, 2004 in Section 2.4.3). Moreover, these values are inter-related and one leads to another, reflecting Danner's (1981) work as mentioned in Section 2.4.3. Thus, submitting to Cox's (2003) claim in Section 2.4.3, these perceived values are indeed highly complex and highly individual depending on the member and the context of the research groups concerned.

In order to facilitate further discussion on the perceived values identified in this research, the values of CoPs' membership discovered in past literature (as mentioned in Section 2.5) were used as a base to support the findings of this research and to draw similarity as well as pick out the perceived values that are new to the HE environment. In order to distinguish them, the perceived values identified in this research will be highlighted in italics. At the same time, other theories discussed in chapter two i.e. perception, value and research in HE, would also be considered.

6.2.1 Perceived values supported by past research

This section will study the perceived values more in detail by linking it to the significance in the HE context. More specifically, it will look into how some of the perceived values discovered in this research (in the HE sector) are supported by the perceived values identified in past research (in various sectors). Hence, the perceived values mentioned in Section 2.5 are used as a framework for discussion as well as to draw on the similarity or differences of the perceived values between HE sector and other general organisations. This section will address the perceived values that are supported by past research and where possible point out how this study contributed or

further understanding of individuals' perceived values of research-based CoPs specifically in the HE context whereas the next section will highlight the perceived values that are new to doing research in HE which have not been discussed in such a way in general organisations.

6.2.1.1 Develop new knowledge

The findings revealed that the research-based communities are indeed an *informal ground for learning and training* as they provided settings that are conducive for the development of new knowledge that corroborated with McMaster's (20002) description of an informal and voluntary environment and Lave and Wenger's (1991) friendlier environment for learning (as mentioned in Section 2.5.1). Also, because they are informal, these research groups are not bound by hierarchies and embrace members from different levels of expertise, displaying the characteristics of CoPs mentioned in Section 2.3. The research groups under this study are made up of academics, practitioners, students and researchers. Moreover, since they are capable to cross boundaries, these research groups are made up of individuals from different institutions, division or disciplines, coming from different backgrounds (cultures, organisational experience, disciplinary training and preferred cognitive styles) and each expressed diverse layers of experience, differing ways of knowing and multiple areas of expertise which concur with the description of Liedtka *et al.*, 1997 in Section 2.5.1. Through mutual engagement, members exchanged knowledge and shared their experience by detailing and reflecting on their research and professional practices that are directly relevant and the knowledge produced is usable and have helped them in their jobs and daily use. This is valuable because these experiences are varied, broad, multifaceted and situated which

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demonstrated the central tenets of CoPs i.e. situated learning and reflective practice, as mentioned in Section 2.3.2, where individuals reflect with other on their practice and the knowledge obtained are used in their everyday situations.

In addition, it was evidenced that the less experienced members have received guidance, knowledge and nurturance from the more experienced members. As they engage with each other, over time, the novices have learned more about practice by working in close collaboration and communicating with experienced academics while the more experienced members get new perspectives from new researchers. The way members functioned within the group was based on their respective resources in terms of skills, expertise or time i.e. some took on responsibility for a particular part of the research project they are expert in while others played a supportive role. This permitted members flexibility in the role they play and the degree of their participation. The description of learning in these groups evidenced Lave and Wenger's (1991) LPP pathway (mentioned in Section 2.3.3) where individuals can participate in different ways and different degrees to learn the practices and gain new insights as they progress in the community. Members found this valuable because they do not have to be at the forefront at all times and they can participate at various levels at different stages of their membership.

Thus, there is value in the concept of LPP in these contexts as it enabled members to learn how to become full members of the group and it allowed them to collaborate imaginatively with others. This form of learning is social and situated in their practice and it is seen as informal training since members are learning under the tutelage of senior researchers. So, there is clear evidence of learning and sharing of best practices

and the types of knowledge gained in these settings such as learning about doing research (different practices, different methodologies and different tools), about research funding (how to apply, the strategies, policies and procedures), about practices in workplace, about writing or publishing (art of writing and politics involved), about their area of interest and about the profession (discourse and practices of the academia world) have helped members in their research and their job in the workplace.

Also, these collaborative enquiries led to greater awareness of the research environment and the skills required to do research and to attract funding. This is pertinent in today's HE research environment since it requires not only intellectual and technical expertise but also social and management skills to work as part of a group, especially in facing the challenges of collaborative or internationalised research (as highlighted by Altbach and Lewis, 1996; Katz and Martin, 1997; Kirkland et al., 2006; Rousseau and Fried 2001 in Section 2.7). Moreover, members gained knowledge of their research interest and this is important for academics to stay at the forefront of their disciplines.

Thus, as members participate, they learn and develop new knowledge and these insights have enabled them to add or fine-tune their personal knowledge base. In fact, they are continually learning how to communicate with others and drawing simultaneously on different forms of knowledge from a wide range of background and expertise and these conversations have led to increasing and improving their practice. Also, they are exposed to new learning experiences and gain knowledge outside their comfort zone, which is relatively rare at universities, as claimed by members. In this sense, learning is seen to be an ongoing experience and a social activity that take place as members join

and move through the research group and this correspond to the kind of learning Brown and Duguid (1991), Lave and Wenger (1991) and Wenger (1998b) submit to, where practice is an essential part of learning and gaining knowledge.

6.2.1.2 Help to expand skills and expertise

Given a group that is inter-disciplinary, members value these settings as they can study an issue from different professionals, getting *alternative perspectives*. While members may have a passing knowledge of many different areas and many have developed a deep understanding of a given area, they have acknowledged that they are not experts in every area (as exemplified by Andrew in Section 5.5.12). This is especially necessary with the increased specialisation and advancement in disciplines which requires the bringing together of knowledge (as recommended by Bush and Hattery, 1956; Jewkes, Dawers and Stillerman, 1959; Marginson, 2006; Smeby and Trondal, 2005; Smith, 1958 in Section 2.7). Hence, given such difficulties, members considered getting alternative perspectives as a multi-method approach to support or broaden their knowledge and skills needed to respond to the increased complexities in collaboration and in research.

This is because perspectives at a group level can be brought in juxtaposition so as to increase divergent thinking and this exposure to other ways of knowing leads to recognition and appreciation for other perspectives, which is an important capability for academics to have in order to achieve success. Essentially, these groups of researchers are with a common or overlapping set of intellectual interests at any given moment and this means that members need to deal with the increasing complexity of the knowledge base. As they participate, members explicate their ideas to get feedback and solutions

from others. These views are valuable since there are often many solutions to each problem and members are aware that multiple minds are better than one (as exemplified by different participants in Section 5.5.6 and asserted by Wenger *et al.*, 2002a in Section 2.5.2). Therefore, members welcome alternative views from others to raise a discussion and in fact, knowing how to deal with multiple perspectives in constructive ways is an important skill an academic need to learn because the ability to communicate across multiple perspectives is crucial to academics' practices.

Moreover, individuals are not only members of one research groups as they sit on other groups and draw ideas from them. Given their different background, past experience and personal perspective, they bring in different style and different perspectives that a sole researcher would not have thought of or even known about. This is critical in terms of doing research as it facilitates the synthesis of theoretical assumptions from different disciplines and it encourages division of labour where a single researcher might be handicapped. This type of collaboration or social intercourse is important in doing research and in applying for funding as it promotes intellectual stimulation, *cross-fertilisation* and a multiplicity of perspectives which provided members with an edge in research productivity (as asserted by Whiffen, 2001; Cronin, 1995; and Leonard-Barton, 1995 in Section 2.7.3). Hence, there is clear evidence that these research groups are grounds for *cross pollination of ideas* between communities or disciplines, crossing the normal research boundaries and paradigms where members expand their skills and expertise. This keeps the group lively and valuable because members can see things from others' perspectives and can gain a broader perspective of their research.

6.2.1.3 Creativity

Members have commented that the environment of their research groups is relaxed and conducive, playing an important role to influence their participation and how they are stimulated to develop, to exchange and to communicate knowledge. Due to the fact that they are self-organising, members have the *autonomy* and the independence to set their own aims and research agendas. In other words, they are empowered in their research and have the freedom to independently pursue their intellectual directions. This is vital in the HE environment because they are professional dominated organisations and academics demand autonomy in their performance (as stated by Clark, 1963; Harley, 2002 and Wagner and Kellams, 1992 in Section 2.7.1). This self-regulation provided members with incentives and motivation to learn as well as taking responsibility to accomplish goals since it is not a forced thing and they set their own deadlines. Thus, members conduct research and organise their own learning through self-determined interests and this is vital because as mentioned by Finke and Will (2003) in Section 2.7.1, research cannot be forced and faculty needs to do it out of their own initiative.

These autonomous environments gave members the freedom to get random with their research ideas, challenge or test ideas and they permitted *freedom to think beyond* their existing knowledge frame and research boundaries. In fact, this enabled them to be more flexible in engaging with materials beyond their research interest, thereby developing a meaningful understanding of their research. Additionally, given that these research groups are informal and unplanned, members mentioned that they sometimes stumble on new ideas or get inspirations from the dialogue and exchange that transpires between members when they brainstorm ways to overcome a problem or need. This

confirmed Nonaka's (1994), Orlikowski's (2002) and Por's (2003) work on creativity as members corroborated that under such circumstances, they are more creative and their interaction with others have been *sources to research ideas*. Moreover, with the *multiplicity of perspective*, it allowed a diversity of ideas and experiences to be expressed and tested and this is important to stimulate and spark-off research ideas and to improve the quality of research. This is valuable because researchers usually need to come up with something original in their research and these groups are places that foster creativity and create sparks necessary for igniting innovation in research. Also, this is critical in the HE since usually they are responsible to generate new knowledge to bring the society and industry forward (as stated by Grant and Edgar, 2003 in Section 1.3).

6.2.1.4 CoPs as a sounding board

In line with past research (Nonaka, 1994 in Section 2.5.4), members also found these research groups to be places where they can articulate, exchange, challenge and refine their thinking. They treated each other as *sounding boards* and a place where they can bounce off ideas, even if they are half-baked ideas or not eventually realised. For members, the research group is a safe haven to take risk and to test out ideas and this is supported by what Rumizen (2002) described as a non-threatening forum. Members found this process of articulation to be an important and valuable exercise because quite often in so doing, they listened to themselves, verified their thinking or may see the answers for themselves (also suggested by Bhatt, 2001 in Section 2.5.4). In addition, members wanted feedback on what they have reasoned and they relied upon each other in terms of learning and validating equivocal ideas. This is in line with Dixon's (1999) view (in Section 2.3.2.2) that learning requires others to accomplish it.

Therefore, interactions in these research groups are in the spirit of constructive inquiry and cooperation so that increased understanding is gained rather than winning. Members also mentioned that they could just expose their ignorance, ask any question as they felt that it is not a competing ground and others would not use their openness and weakness against each other. This indicated that members felt comfortable sharing and there is a palpable sense of trust as members believed and have confidence in each other which is important for knowledge sharing as mentioned by Roberts (2000) in Section 2.3.4. Hence, these research groups are places where members can bounce off ideas and they know that their secrets are safe and that others are committed and are there to help. Otherwise, it impedes members to open-up and they choose not to share.

6.2.1.5 "Hands-on" experience

In these research groups, it has been noticed that the knowledge that gets passed around is not limited to explicit information. In fact, most of what has been shared is the implicit or tacit knowledge as whatever members pull together were based on their work and their real experience. They have argued that whatever learned in these research groups are not book stuff and they cannot be found anywhere but through their interactions (as clearly specified by Annie in Section 5.5.12). This is because as they interact, members reflect on their practice and draw upon their pools of tacit, as well as explicit knowledge, to contribute. They tell about their research and funding experience as well as practices in their workplace. In effect, members learn the subtle cues, the nut and bolts and the untold rules of thumb in doing research and their profession, and these cannot be found in formal places or any documents (also indicated by Brown and Duguid, 1991; Orr, 1990 and Wenger *et al.*, 2002a in Section 2.5.5).

Thus, what makes these research groups valuable is the tacit or *practical knowledge* that is directly relevant to the work or research of their members. Also, this implied that learning is bound in communities, is social, dynamic and rooted in the exchange and creation of knowledge across boundaries. Individually and collectively, members gained more understanding or more specifically, a tacit sense of what to do and how to act in particular situations that is unique to the group and the HE environment.

6.2.1.6 More fun and meaningful participation

In line with Wenger and Snyder's (2000) statement (highlighted in Section 2.5.6) about like-mindedness, members commented that participation is more fun and meaningful because others are *like-minded*, sharing similar dreams and aspirations with them. Members brought this perceived value further by explaining that the fact that they talk the same language and share a common frame of reference, it enabled them to strike a good and *intellectual discussion*. This is because members have the fundamental knowledge to bring the discussions to a higher level and they understand where each other are coming from. This is precious because in this way, members have special connections with each other and they understand each other's stories, difficulties and insights. What mattered to them was that they had arrived at a place where they can fully immerse in the discussion and enjoy it. They could make connections among the topics of their field and speak about them cogently. Therefore, for the discussion to be valuable, others need to be talking at their level and understand their work. This way, they do not have to keep going back to explain and it increased the quality of discussion thereby avoiding frustration as the discussions were intense and in-depth. This requirement is unique to the HE context due to its distinct structure of specialisation (as

mentioned by Mattheou and Saiti, 2005 in Section 2.7.1) and this did not appear to be an issue in past research in other sectors. Effectively, these are moments of intellectual intercourse where members compare, explore, debate and learn from each other and this keeps them on the cutting edge of their functional discipline.

Moreover, confirming with Fontaine and Millen (2002) as well as Wenger *et al.* (2002a) said in Section 2.5.6 about individuals getting help with immediate problem, members indicated that through these discussions, they have got useful feedback as they are comments from knowledgeable peers. The central issue is that members found others understood their research which made discussions relevant and related to their own practice or subject matter. They have gained insights from responding to questions and then comparing their responses with others, gauging their ideas and expertise. These intellectual discussions inspired them and members felt more motivated to do research, a force coming from intrinsically rather than by external factors and this corroborated Finke and Will's (2003) suggestion in Section 2.7.1 that faculty cannot be forced to do research but they need to do it out of internal drive. This is because the zeal and the keenness about the topic energise them and this has made work more meaningful in research and also in their formal workplace. They enjoyed each other's company, the stimulation and the academic exchange. This also fostered a feeling of intellectual companionship and it is vital when doing research because it can be a lonely activity probing the frontiers of knowledge where few, if any, researchers have been before.

Hence, apart from intellectual reasons, participation is more meaningful and fun due to social reasons. Also, for professional and personal reasons, members mentioned that

participating in these groups have boosted their self-esteem when they helped and shared between each other as these acts are aimed at maintaining the well being and integrity of others and themselves. In past research, it was never mentioned that CoPs functioned as a place to exercise their professionalism but members evidently indicated in Section 5.5.20 that these research-based CoPs are indeed places where they can exercise their professionalism and uphold their professional integrity as they felt that it is their sense of duty and it is the right thing to do. Some even go above and beyond their duties and responsibilities and see it as a voluntary contribution towards their field and the society as a whole. It is in fact taking their position in their community. These are not directly or explicitly rewarded but members find it *intrinsically fulfilling* when they are able to help others because it made them feel needed, wanted and appreciated, what more knowing that their contributions are of value. This enabled them to use their capabilities to the fullest and gives them more confidence, rewarding them in the sense of personal worth. In fact, they just want to be part of the community and more importantly, they are pursuing what they are passionate and enthusiastic about, and this is the authority of knowledge Wagner and Kellams (1992) is referring to in Section 2.7.1.

6.2.1.7 Networking and keeping abreast of a field

By joining these research groups, members stated that they are part of a network where they can know and communicate with people in or related to their field or to their professional community. It enabled them to develop close relationship and collegiality between each other where they not only know each other conceptually or professionally, but also personally. Members are aware of and are familiar with each other's situation and research interest and given this understanding it has facilitated them to work

together effectively. Thus, through *networking* in these groups, they know who worked on certain research area, what kind of work they focus on, has anybody worked on this before and etc. They keep each other in mind and can link up their work to foster possible collaborations. Also, supported by Liedtka *et al.* (1997) and Rumizen (2002) in Section 2.5.7, these webs of relationships have assisted members to gain access to expertise in terms of knowing who to ask when they have got an idea or a problem or when they needed advice. This enabled them to support each other not only professionally but also personally.

Even if they are not able to help, in line with Fontaine and Millen's (2002) suggestion in Section 2.5.7, members pointed each other to some directions as they are part of many social networks. Hence, the benefits of working in these research groups are, they are not confined to the links of the immediate members but also to other networks which members are part of. In fact, they offer to help others find connections and tap into each other's networks and gain the benefits of what Granovetter (1982) called the weak ties that cross institutional boundaries to connect to different social setting with dissimilar persons. In other words, they plug into a wider network of contacts and in this way members can greatly extend their networks.

Moreover, members have indicated that these research groups have helped developed the connections, relationships and context that allowed the *sharing of information and knowledge* to flow between those who have knowledge and those who require it. Therefore, these networks are important and valuable because they permit broader access to relevant information and members get the latest *updates* in their field or hear

the latest "professional" gossips to have a fuller view on what is going on in their respective environment, and to keep abreast of leading thoughts in their functional discipline. This access to resources and being more resourceful can improve satisfaction in research as well as members' effectiveness, and this is pertinent because academics as knowledge holders need to keep their store of knowledge current and replace redundant knowledge with new understanding and expertise in matters which are relevant to today's needs. Additionally, in terms of doing research, networking plays an important role because members indicated that it is not only what you know but who you know. This confirmed Allee's (2000) suggestion that one needs to network in order to be resourceful and have access to information and aspects of activities that affects the successful functioning of that matter in addition to the skills and knowledge members have. Thus, members joined these research groups as a way to socialise and build their networks in the academic community.

6.2.1.8 Help and support from members

Through building these relationships, members get help and support from others (as suggested by Wenger et al., 2002a). The findings have shown that these research groups provided an environment that both initiates and supports development. It was commented that the quality of members makes it different and *supportive* in the group. Members indicated that others are altruistic and they shared almost anything with a sense to develop and to encourage, which is truly out of their passion and enthusiasm (as expressed by Becky in Section 5.5.17). They are aware that these are not forums to criticise but to be constructive in a supportive way as nobody is out to boast and they are genuinely interested in the topic. Moreover, their stories highlighted emotional and

moral support stories where everyone is equal and conversations are characterised to be two-way and members respect what each got to say. This created an honest discussion within the group and without anyone dominating it. The seniors were willing to leave their turf, territory and power behind in coming to the table, trying to relax the distance between them (as clearly evidenced especially in the EngLit Group). This provided an egalitarian environment conducive to knowledge since members felt comfortable to express themselves because they believed whatever they got to say is just as valid and equal, agreeing with McMaster's (2000) statement about creating a comfortable place to challenge and be challenged to produce results (in Section 2.5.8).

Additionally, in doing research or their job, members go through peaks and troughs in the process or they needed an outlet to vent out their anger or to let out their frustrations. By sharing their stories or experience, they realised that they are not alone and they felt relieved as they have research friends to help and *support* them. The bonds here are tighter and more resilient, what more, if those members has a direct affinity and a closely shared interest. They developed collegiality and became friends to call on when they have problems as members understand and know about the details of each other's work. For instance, it was exemplified that these are critical friends where members would send draft papers for comments and those that take some trouble to read and make suggestions to further improve them. In this sense, this relationship concerns members working together with a sense of compatibility with whom they join to create value. It can be argued that members can find an alternative venue but Hazel and Vivien clearly indicated in Section 5.5.17 that they would not bring it anywhere else, except their research groups because for them, the most important is knowing that there is someone

to talk to, someone whom they trust, someone to hold their hand and someone who understands. Therefore, these support and guidance are essential in enabling members to gain emotional as well as moral support during low times to encounter them more positively compared to when they were on their own. All these acts of *support and guidance* can be seen as an anchoring relationship described as providing safe harbours that reflect the preciousness of members with whom one can develop such rapport.

6.2.1.9 Sense of belonging

The environment mentioned above fostered a *sense of belonging* where members care and show concern between each other e.g. there is a sense of responsibility between each other. It was a place where members go beyond the requirements of their jobs to help their community succeed. They supported each other and enjoyed the attention given. There is a sense of having an "intellectual home" or in Wenger *et al.*'s (2002a) terms, a professional home (stated in Section 2.5.9) because members know what each other are doing and there is a fit between them, working in conjunction with each other and talking the same language. This reflected Reynolds' (2000) sense of sharing because members stated that there is a feeling of community-ness as they are the people with whom members discuss problems and whom they can talk to or seek advice. In essence, members were in high spirits to contribute and to be successful. It is more about the group rather than themselves as members are committed and that they are there for them.

6.2.1.10 Sense of identity

As members interact in these research groups, they placed themselves in the context of a community with a shared discourse and repertoire of behaviours and this served as a

platform to build their status and reputation (supported by Castro, 2003 in Section 2.5.10). They were involved in many forms of professional conversations and this gave them opportunities to participate in and contribute to a broader community of discourse to help establish their places in the academic community as well as in their research field because as mentioned by Wenger (1999), individuals can relate to the community as a whole. Through socialisation into the profession, members absorb common academic values which bind them together, thereby giving them a sense of who they are, forming their identities and labelling themselves.

Essentially, members learned how to do work of educational research and gained a sense of being educational researchers. These relationships afforded them the opportunities to collaborate with others and there is a growing sense of the profession and of themselves as contributing members. They actually felt that they can talk intelligently about some common issues and this has definitely helped shaped their *identity*. As members engaged, they acknowledged each other as participants and negotiate their identities and this is consistent with the social constructionist point of view (as mentioned in Section 3.2.3), where identities are constructed as individuals interact with one another. Therefore, through their participation, they gradually construct their identities and re-labelled themselves. This is in line with the work of Wenger (1999) and Brown and Duguid (2001a) on how individuals interact regularly to share an understanding of their domain and practice (mentioned in Section 2.5.10). In fact, the kinds of activities in these research groups draw out members' knowledge in the context of a concrete problem and affirm their identities as a researcher and a practicing academic.

In summary, the sections above have considered how some of the perceived values discovered in this research fit in into and are supported by past research. Also, in many ways, the outcomes of this research corroborated with what others have said in general organisations or sectors. Although these perceived values overlap with past research or other general organisations, they are original as their emphasis and the way they impacted individuals differed between the literature and the empirical (interview) results. In fact, the outcomes of this research have brought it further by looking into the value of CoPs' membership in doing research in the HE sector and individuals have reflected and valued it for different reasons in their respective context. The remaining perceived values that are identified by this research are those that have originated from the HE environment and have seldom been discussed in such a way in past research. The following section will highlight their distinctiveness.

6.2.2 Perceived values originated from doing research in HE

This section will single out the perceived values that were identified in doing research in the HE environment which may not be focussed in the past research or found in other sectors. In doing so, it will help to contribute to the CoP concept by further understanding of the notion of CoPs as well as give insights to the values of CoPs' membership in the context of this research.

6.2.2.1 Opportunity to meet

This perceived value has not stand out in past research because face-to-face interaction was not compulsory as individuals can meet virtually. However, in the context of this research, members have mentioned that these research groups have created the

opportunity to meet and this is valuable because they might know each other but they did not have the chance to meet periodically. This is especially true in large institutions like universities because members mentioned that they knew each other by names but did not actually meet and even if they know each other, there is rarely time to meet and interact, what more to talk about research (as commented by Roy in Section 5.5.15). Additionally, with the rigid structure of HE (as mentioned by Mattheou and Saiti, 2005 in Section 2.7.1) it is even more difficult to find people with similar research interest. Due to this, opportunities for serendipitous knowledge exchanges are eliminated or reduced and this also inhibited knowledge transfer as members are not aware of each other or are not in regular face-to-face contact (this is supported by Tippins, 2003 in Section 2.7.1).

Under such circumstances, an opportunity to meet each other face-to-face is considered very important because otherwise they cannot discuss with or challenge each other if they do not come together as a community. However, it needs to be pointed out that this is not to say that virtual CoPs are not functional. It is just that the researcher argues that most social interaction occurs during the meetings and it is effectively a meeting of minds of people with common interest. This argument is in line with the work of Lesser and Storck (2001), Orlikowski (2002) and Stamps (2001) as mentioned in Section 1.7 where they asserted that meeting face-to-face is a condition to real collaboration. Moreover, given the capabilities to cross boundaries, these research groups created an opportunity for members from different disciplines, divisions or universities to meet which is an important criterion for stimulating research especially in knowledge-

intensive institutions such as universities (as asserted by Dorsett *et al.*, 2002 and Prusak, 2001 in Section 2.7.3).

Thus, in line with Holtshouse's (1998) argument on co-location as a critical factor to share especially tacit knowledge (in Section 1.7), the researcher argues that sharing insights is essentially a person-to-person activity and these research groups are valuable in creating the human interaction for members to build enough common contexts to understand each other, enough trust to be willing to share ideas and enough spark to draw out the tacit knowledge others have. This is paramount since tacit knowledge is what made these research groups valuable. Indeed, these groups create opportunities for a point of contact or a physical meeting, important to achieve the necessary level of engagement. Furthermore, these engagements in recurrent face-to-face interactions are particularly useful especially in the context of HE because it enacts an ongoing and evolving knowing of the members in the groups and the subject matter in their field.

6.2.2.2 Overcoming intellectual isolation

Usually, in past research (as mentioned in Section 2.5.1 and 2.5.2) individuals join CoPs to get broader perspective, for problem solving or to develop their expertise and skills. However, it was never mentioned that individuals join CoPs deliberately to overcome intellectual isolation. This stands out in the HE environment as individuals can concentrate on a particular area of interest or they are researching in areas that are obscure whereas in other sectors this did not appear to be a major problem. Moreover, the organisational structure of universities that is highly specialised (as mentioned by

Mattheou and Saiti, 2005 in Section 2.7.1) promotes silo behaviour and research overspecialisation (Sample, 1972; Waddock and Walsh, 1999).

It was evidenced that members are aware that often they work in their own ivory tower and this is not necessarily beneficial. As stated by Andrew in Section 5.5.12, individuals are aware that they do not know everything and also supported by Wenger *et al.*, 2002a in Section 2.51, knowledge in any one field is too complex for one to master. Moreover, with the increased complexities in collaboration and research (as mentioned by Henkel, 1997; Knorr Cetina, 1999 in Section 2.7) as well as the increased specialisation and the advancement in disciplines (stated by Bush and Hattery, 1956; Jewkes, Dawers and Stillerman, 1959; Marginson, 2006; Smeby and Trondal, 2005; Smith, 1958 in Section 2.7), this led to an increasing demand to bring together one's knowledge with others and to obtain cross-fertilisation across discipline (as suggested by Beaver and Rosen, 1978, 1979a, 1979b; Becher and Trowler, 2001 in Section 2.7).

Therefore, members have indicated that joining these research groups is a way to *overcome intellectual isolation* and to avoid feeling lonesome in their research journey. This is because as clearly evidenced, these research groups broke down the forbidding hierarchies in the universities which are usually structured according to disciplines or divisions and members can come together regardless of their discipline or status. Members commented that they can avoid overspecialisation and overcome their limitations by getting alternative perspectives and learn from others as members come from different perspectives but towards the same aspiration since these groups bring in different people depending on their research interest. When talking to others about their

research, they felt good to know that their research interest corresponds with others. They get a matched work and can liaise with each other. This means that members can partly overcome intellectual isolation through collaborating with others and support each other, thereby forming working as well as personal relationships with them.

6.2.2.3 Move towards collaborative research

Apart from getting out of isolation, another reason why members have joined CoPs are they have participated to respond to the changes in the research environment. Members have indicated that they have joined these groups to *move towards collaborative research*, reacting toward the changes in the research environment and the trend of the funding bodies moving towards collaborative research across nations, aiming to integrate research and develop research cultures (as mentioned by Becher and Trowler, 2001 and Sargent and Waters, 2004 in Section 2.7).

Members has explained that there they are aware of the shift towards collaborative research and a larger scale project and indicated that they are pressured to form research groups as the solitary research is slightly out dated (confirmed by Roy in Section 5.5.8). Although this is the norm, some members are not happy about it but are left with no choice in terms of implications to funding (as commented by Scott in Section 5.5.8). Hence, members denoted that participation is seen as a way to move towards the change and it has fostered a positive feeling without feeling being forced to. This is because these research groups have created opportunities for them to meet and to collaborate, thereby allowing members to move towards the change positively and to take the basic to work collaboratively with other members. Also, this implicated that faculty's

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research are influenced by the larger dynamic environment or the regulations in the HE environment (as stated by Fox, 1992; Rousseau and Fried, 2001; Trowler and Knight, 2000 in Section 2.7).

6.2.2.4 Response to research pressure

In response to the changes in the research environment, universities has imposed significant pressures from within their institution toward the faculty in doing research. Therefore, on top of the external pressures, members also face pressures internally from their respective institutions (as mentioned in Section 2.7.1) as it is incumbent for an academic to be research active and they are expected to generate funding (as explained by Daniel in Section 5.5.9). So to *respond to these research pressures*, members have joined these research groups since participation in these groups is seen as favourable because they are seen to be involved in research. Moreover, as indicated by Scott in Section 5.5.9, universities are keen to know that there is some kind of collaboration taking place between universities or disciplines. Hence, as mentioned by Don, by participating in these research groups, they are in fact protecting themselves from these pressures as the risk is not being a member in any research groups.

This means that members have joined these research groups as a way to protect themselves from these pressures, to fulfil their research responsibilities or even to increase the possibilities of generating funding through collaborations. Also, the findings of this research has pointed out that it is not that individuals are not willing to do research but most of the time they have desired to pursue research and professional development activities but have had very little time to engage in such activities because

other critical, more pressing items have crowded research and publication into the background. As a result, very little effort has been expended in these activities. However, the outcomes suggested that members of these research groups are still working on some research despite the lack of time and resources to dedicate to these activities but it has not happened nearly as much as they would like.

6.2.2.5 Drive research and foster tangible returns

From the above, it implicated that participating in these research groups has *fostered tangible returns* and *drove individuals' research*. This perceived value is not indicated in past research as one of the reasons for or values of participation, even in the case of this research. This is because it is upon retrospective evaluation that members found that their membership in these research groups to have increase the likelihood that they will desire and have opportunities to engage in research and professional development activities that otherwise might be too time consuming or demanding to do on their own.

In their reflection, members indicated that their engagement in these research groups are not simply discussions but actions are taken to put ideas into tangible returns (as reflected by Becky in Section 5.5.13). The tangible returns members referred to are for instance, publication, collaborations, access to relevant information and skills, solution to issues and personal gain. Members noted that this has helped drive their research as it increased their research outputs and they will make time to attend meetings as they know that others would like to meet them and are also making great efforts to join them (as mentioned by Alicia in Section 5.5.18). This has helped members to take time out of their busy routine to talk about research and to be involved in it, thereby formalising

their research responsibilities (as indicated by several members in Section 5.5.14). In fact, as claimed by Emma, the meetings are their protected time to pursue intellectual activity of being an academic and to do what they enjoy because these research groups created an opportunity for them to discuss about research continuously with a focus since usually they have come together for a purpose or a common interest.

Additionally, as explained by Becky in Section 5.5.14, by setting deadlines for each other have helped to kick things into action in order to avoid feeling bad and disappointing others. This has helped members to research with focus, instead of writing bits and to push research as a higher priority in terms of what they do (as reflected by Daniel). Members found this valuable because most of the time they found difficulties to commit time to research activities due to their teaching and managerial commitments, and these research groups have helped to put research at the forefront instead of at the back of their mind. Ideally, it has helped members to keep getting at research and to be research active as they are in contact with other researchers (as mentioned by Pauline). Otherwise, as mentioned by Annie in Section 5.5.14, it would be easy to just let research activities to fall in the background. Therefore, this has proven that these research groups are not only about social interaction, they also produce concrete outputs to bring members' research forward.

6.2.2.6 Synergy and leverage

This perceived value has been mentioned in past research (in Section 2.5.7) where individuals pool their resources to create synergistic effect and this is also observed in the context of this study (as detailed in Section 5.5.10). Members have found it more

beneficial to be attached to a research group because often they tend to do research in pairs or small groups instead of alone and these are their meeting point to combine efforts and for collaboration to flourish (as indicated by Andrew and Roy in Section 5.5.15). With the issues highlighted in Section 2.7 on the research environment i.e. (a) the internalisation of research that give rise to challenges in the knowledge and skills needed to do research (Altbach and Lewis, 1996; Katz and Martin, 1997; Kirkland *et al.*, 2006; Rousseau and Fried 2001); (b) the increased specialisation and the advancement in discipline that demands the coming together of knowledge (Bush and Hattery, 1956; Jewkes, Dawers and Stillerman, 1959; Marginson, 2006; Smeby and Trondal, 2005; Smith, 1958); and (c) the increased complexities in collaboration and in research (Henkel, 1997; Knorr Cetina, 1999), it is pertinent to pool resources together as often no single member will possess all the knowledge, skills and techniques required (Beaver and Rosen, 1978, 1979a, 1979b; Becher and Trowler, 2001). Hence, as commented by different members in Section 5.5.10, participating in these groups has enabled members to gain access to expertise and to pool their resources for *synergistic effect* because they created an *opportunity for collaboration* and there is a greater probability that between them they will possess the necessary range of knowledge, skill and techniques as members are from diverse background.

In past research, the focus has been on pooling together resources but this research has further extended it as members mentioned that apart from resources, by coming together the group serves as *leverage* in giving them representation by identifying themselves with the work the community does. This is as indicated by Don and Stella in Section 5.5.10 because the research groups gave them a focal point for introduction, a focus to

talk about their research area and they can act within the groups' label and within their practice. Indeed, these groups raised their personal profile in their respective institutions as they are seen to be linked into a community of scholars and in terms of research, they raised their profile as a researcher and as quoted by Stella, it brands them as they are seen to be research active and have the strength of the group behind them.

Furthermore, members see each other as *leverage* to bid for funding and to gain access to resources to move their research forward. As mentioned by Daniel and Lily, in terms of implications to funding, they stand a better chance when they operated as a group rather than working alone. In fact, they believed that they are stronger as a collection of individual and they look more powerful or influential compared to members working separately. This has facilitated them to better deliver the value of their research discipline and experience more fully their cultural identities.

6.2.2.7 Time and energy saving

This perceived value have been mentioned briefly in Section 2.5.6 where by being a member of a CoP, work can be easier or more effective as individuals can get help with problems solving or their work. This research has revealed similar findings (as evidenced in Section 5.5.11) but the nature of time and energy saving is different as it does not refer only to problem solving but also to learning about a subject matter or an area of interest in a specific discipline. Even though members have limited time, Annie in Section 5.5.11 has specifically indicated that the time spent to participate in these research groups is worthwhile because with everyone bringing their own views to the group, it created economies of group input and this gave them immediacy and shortcuts

to solutions, *saving them time and energy* compared to spending weeks and months reading about it.

With this sharing or transfer of knowledge and skills as well as cross fertilisation of ideas, members generated new insights or perspectives that members, working on their own, would not have grasped or grasped as quickly. However, it can be argued that in principle, one might be able to learn or acquire e.g. all the techniques needed to solve a particular problem or to conduct research, but this can be very time-consuming as members need to update their knowledge or to retrain on their own due to the complexity in a specialism or discipline. Thus, this evidenced that it is more economical and rewarding intellectually rather than ploughing along further individually and it leads to higher quality of research or new discoveries.

6.3   SUMMARY

In summary, these research-based CoPs have been proven useful in terms of helping individuals in doing research as they are not just about sharing knowledge, they are also about awakening individuals' passions and making knowledge-sharing and research fun. In fact, they are critical building blocks to convert research ideas into action and also a vehicle for collaboration and interaction among individuals. These research groups have allowed for flexible participation and it provided context as well as content and it is a network place where individuals interact as a research community. Furthermore, they appeared to be an alternative venue for professional development because it gave members the authority to take responsibility of their knowledge, encouraging learning and development. Thus, the findings proved that individuals have derived value by

participating as members in these research groups and their membership has not only helped them in their research but has impacted them personally, professionally, intellectually as well as socially.

This research have yielded twenty perceived values and of all these values, twelve were supported by past research i.e. autonomy and freedom to think beyond; sources to ideas; sounding board; intellectual discussion; like-mindedness; alternative perspective and cross pollination of ideas; informal ground for learning and training; networking, information sharing and updates; support and guidance; sense of belonging; identity; and intrinsic fulfilment, and eight were distinct to the HE environment i.e. overcoming intellectual isolation; move towards collaborative research; response to research pressure; synergy and leverage; time and energy saving; foster tangible returns; drive research; and opportunity to meet. Those that overlapped and supported by past research, even though they were similar but they benefited and impact individuals in different ways that fit into the context of doing research in HE. The ones that were not mentioned in past research but have come out in this research have further understanding of the function and the perceived values of CoPs in doing research in the HE environment. This is the crux of this research as these perceived values have arised due to the unique nature of the HE sector, which were not highlighted in other sectors in past research. Moreover, two perceived values i.e. networking and support and guidance, are more prominent compared to the rest as all participants in this research have one way or another highlighted them as these are the two basic desire and yearning of individuals with implication to communities (as mentioned in Section 2.2).

Hence, the outcomes of this research have extended the CoP concept to doing research in the HE environment and the findings show that it not only work and benefit individuals in other sectors but also individuals in the HEIs. Also, it provides further understanding on the values of these research-based CoPs and this adds to the research literature in CoPs as well as the HE context. These perceived values are personal and less quantifiable and the impacts of membership have brought direct and indirect benefits to individuals' research and their formal work. It does not happen in a single event but through the ongoing and the string of activities when joining these groups.

CHAPTER 7

CONCLUSIONS AND IMPLICATIONS

7.1   INTRODUCTION

The results of this study indicated that participants found their membership to be valuable resulting from participating as a member of research-based CoPs. It has provided further understanding and insights of the values of membership in research-based communities in HE where these groups have demonstrated that they act as vehicles to help members in their research and have impacted them personally, professionally, intellectually and socially. This chapter makes some concluding remarks based on the key findings of this research. Consequently, it will explain the contributions of this research towards knowledge and practice followed by the implications the key findings might have for academics/researchers and the HE sector. These implications relate both to individuals' who are doing or who plan to embark on research, and, by extension, to organisations' research profile. Finally, the chapter looks into some of the limitations of this research and makes some suggestions for future research on CoPs in HE so that researchers can discover more about their potential impact on its members.

7.2   CONCLUSIONS

This study has set out to illuminate and to gain insights of individuals' perceptions of the value and impact of CoPs' membership within research communities in HE. Taking the social constructionist's standpoint, the aim is to unravel the complexities of individuals' constructions or reflections on their experiences as they participated

in CoPs, studying from the lens of an interpretivist. It interprets why individuals joined and continued joining CoPs; why they perceived their membership valuable; how it helped them to improve their research; and in what way it impacted them.

The findings of this research revealed that their membership in these research communities is valuable and have improved the quantity and the quality of their research. Participants found their membership to be valuable resulting from participating as a member of these research-based CoPs and it is upon retrospective evaluation that they realised the values and impacts of their membership. Initially, individuals may not see anything and it does not impact them. This is because value is complex and it may be difficult to be surfaced. However, the methods used in this research i.e. observation and interview have led individuals to relate their experience and it is through the reflections, they have made sense of their experience thereby illuminating the perceived values and impacts of their membership.

7.2.1 Perceived values of membership

This study has produced twenty perceived values, have confirmed that they are beneficial and have explained in what way it has helped individuals in doing research. They are presented in Table 7.1.

Perceived Value	How it has helped in research?
Autonomy and freedom to think beyond	• Members are empowered to independently pursue their own research directions. • There are no deadlines, nobody is out to win, not bound by boundaries and hierarchies and it is opened to anyone interested in the research inquiry. So members are more open to talk and chat about their research. • An environment that is conducive to be creative and to think beyond their research boundaries. This enabled them to be flexible and to develop meaningful understanding of their research.
Sources to ideas	• They are places of creativity as it stimulates thinking and spark-off new ideas. • Ideas and inspirations transpire from informal exchanges. They share almost anything as there is trust between members and it is a safe haven to test out or verify ideas, expose their ignorance and others would not take their advantage.

Sounding board	• A place to talk it out, to explore and bounce off research ideas.
	• Learn how to explicate thinking and by talking through things, members listen to themselves, hear how it sounds out loud, see what others think and this helped to establish their thinking and bring out ideas.
Intellectual discussion	• Members are talking at their level and understand their work. They have a basic foundation of knowledge where one do not have to keep going back to explain. This adds on to the quality of the exchange and avoids frustration.
	• They can fully immerse in the discussion and enjoy it. They congregate to debate and hear more diverse kind of things. Discussions were intense and in-depth. It was challenging their thinking and they can know where they stand.
Like-mindedness	• Members were talking the same language and there is mutual understanding of where each other are coming from. They share similar dreams or values.
	• They felt good to know that their research interest corresponds with others, who come from different perspective but towards the same aspiration. They get a matched work and can liaise with each other.
Alternative perspective and cross pollination of ideas	• Multiple minds are better than one since there are many solutions to each problem. They welcome alternative views to raise a debate and this made discussions more meaningful and rewarding as members gained broader perspective of their research.
	• These views are valuable as these are feedback from knowledgeable peers. They have gained insight from responding to questions and then comparing their responses with others, gauging their ideas and expertise.
	• It keeps them on the cutting edge of their functional discipline as there was cross pollination of different practice and paradigms. The groups are inter-disciplinary and members bring in their own style and different perspectives that the sole researcher would not have thought of or even known about.
Overcoming intellectual isolation*	• An opportunity to meet others so as to overcome isolation in their work, especially when their research is too narrow or they are the only one in the subject field in their institution or their research is of minority interest and it is difficult to get a critical mass or researchers within one institution.
	• By engaging with others they avoid concentrating too much in their ivory tower, avoid being lonesome or isolated and to ground their research in practice. They are more opened and positive about others' research.
Move towards collaborative research*	• They were more adaptive to the changes in the research environment and the funding bodies' grants where there is a shift towards collaborative research and larger scale project. Members are pressured to form research groups as the solitary research is slightly out dated. It created opportunity to meet up and combine efforts to gain funding.
	• Some are not happy about it but participation have helped them move towards the change and fostered a positive feeling, without feeling being forced to.
Response to research pressure*	• Members have joined the groups as a way to protect themselves from pressures to fulfil their research responsibilities or to generate research funding.
	• Participation in these groups is seen as favourable as members are seen to be involved in research and it has helped them to fill in some boxes in their appraisals.
Synergy and leverage*	• With limited time and resources, members combined their effort to produce higher quality of research. It is more rewarding rather than ploughing along further alone.
	• They allocated and shared their work based on each others' strengths and bring in different aspects of the investigated problem. Each would see how they can fit in, thinking about how to connect what they know in their respective area with what they do to produce a higher quality of research.
	• They gained more strength in terms of numbers and look more powerful than just individuals working separately. They present themselves collectively, looking more influential and they stand a better chance.
	• It is a leverage to bid for funding and to gain access to resources to move their research forward.

Time and energy saving*	• The time spent is worthwhile as members find answers to many questions. It saved them time and energy later for gathering new information and ideas. With everyone bringing their own views to the group, it creates economies of group input and this facilitates immediacy or shortcut to find out about a subject matter compared to spending weeks and months reading about it.
Informal ground for learning and training	• Members hear about the research cultures in different institutions/divisions and this gives them ideas that they can use in their research or their formal work. • They learned research practices from experienced member by being exposed to different ways of doing research in different environments, getting a full picture of the process. • They gained knowledge about research funding. As they exchanged research experience or stories, the information offered is useful to modify what they currently do and think about how they would handle a similar situation. They also gained understanding on the skills required, the strategies and the politics involved. • They learned the subtle art of writing and the process to get published. • They broadened their knowledge by learning the intricacies of their area of interest such as quirky things that members might not know at all. This strengthened their skills and helped build up old concepts and truly understand it. • It is an informal training ground to learn and discover the academic profession. They are exposed to the academic community and interact with experienced professional. It is a way they can exercise and learn about the academia world. • It enhanced members' learning and self-efficacy as the groups provided them with tips or the tricks of trade and hands-on experience. This practical information is not available elsewhere and would be impossible to find.
Foster tangible returns*	• Members are more productive in research and the meetings are not merely discussions but actions are taken to produce tangible returns e.g. publications, collaborations, access to information and expertise, solutions to specific questions and personal gain. It is something they can cherish or bring their research forward.
Drive research*	• It facilitated contact with other researchers, to keep getting at doing research, thereby keeping members research active. • It has motivated them to put research at the forefront instead of at the back of their mind. The meetings and the activities allowed them to set themselves research deadlines, to focus on it and to do it. It would be otherwise if they are on their own. • It is their time out from the grind of academic work and it is protected time to be involved in research and forget about their formal work temporarily. They can fully concentrate and think about research instead of writing bits.
Opportunity to meet*	• Members see each other more because of the group and it is their meeting point for successful collaboration to flourish. Members might know each other but they may not have the chance to meet periodically. Most social interaction occurs during the meetings and it is a meeting of minds of people with common interest.
Networking, information sharing and updates	• Members socialise to know each other better, both conceptually and professionally. They are part of a research network, knowing people in their own field or their professional community and communicate with them. • They are aware and are familiar with each other as they know who is doing what and knowing who to ask when they have got an idea or a problem. They keep each other in mind and can link up their work to foster possible collaborations. • Otherwise, they point each other to the right direction as each has their respective networks. Members tap in into other networks and extend their networks to get to know more people that can facilitate to develop their research. It opened doors to funding and other career opportunities. • Members also foster personal relationships, knowing each other at better

	length, not only for what they do in their research. Those newly joined an institution or are new in the city, it is a venue for them to blend into the community and to mix around.
	• Members get relevant information and updates on the leading thoughts of their field and hear the latest "professional gossips". They know what each other is about and what is worth sharing. They get information pertaining to upcoming conferences or call for papers and share information about what is going on in their respective workplace. This gives a better understanding of the environment they are operating in or the environment each is going through. They have a fuller view and can be more resourceful.
Support and guidance	• Members received help to further improve their bid and bring their research forward.
	• They get support when they were down or wanting to give up their research. They were able to turn around the situation and to make the best out of it
	• The group is a place to moan or to let out frustration, to balance their role in their workplace and they are relieved to know that others are going through the same experience and can exchange information to improve the situation.
	• They developed collegiality and are friends to call on when they have problems as they know about the details of each other's work. Also they are friends that understand, have similar aspirations and can comprehend exactly what they are going through and how they felt.
	• They do not criticise but to be constructive in a supportive way. Members are not out to boast and they are genuinely interested in the topic. Members were treated equally and others were respectful of their contribution. It created an honest discussion within the group and without anyone dominating it. They were willing to leave their turf, territory and power behind in coming to the table.
	• Novices did not feel intimidated and they gained nurturance from senior researchers who are also knowledgeable in their area of research. They are altruistic and they share almost anything with a sense to develop and to encourage, which is truly out of their passion and enthusiasm.
Sense of belonging	• They feel emotionally involved and there is a feeling of being connected, a feeling of community-ness. They felt right as there is a fit between them, intermingling with members working in conjunction with each other.
	• It is having an 'intellectual home', a place where they can go to when they needed to talk about their research.
	• They were in high spirits to contribute and to be successful. It is more about the group rather than themselves as they have a sense that there people there for them, people who are caring and committed.
Identity	• Members get a sense of who they are, see themselves as academics doing intellectual work and felt more of an academic rather than a lecturer or teacher.
	• They build an identity as a researcher and raise their profile, constructing an image and labelling themselves, building an identity of how they wanted to be recognised and how others see them.
	• The group gives them representation or status by identifying themselves with the community. A focal point for introduction and to act within a label, it brands them.
Intrinsic fulfilment	• They can pursue their passions and can exercise their enthusiasm. The zeal and the keenness about the topic energise them and they inspire each other, rewarding them in the sense of personal worth.
	• They can discharge their professionalism or uphold their professional integrity, allowing them fulfil their sense of duties and responsibilities as academics. They felt good to help others, knowing that their contributions are of value and they can use their capabilities to the fullest.
	• It is worthwhile because it is fun and they have done it for pure enjoyment.

Table 7.1: Summary of Perceived Values

Based on the empirical results and the theoretical framework (CoP concept and values of membership discovered from past research) discussed in chapter two, these twenty perceived values have emerged. Twelve were similar to and supported by those discovered via past research in general sectors and eight (those marked * in Table 7.1) were typical and originated in the HE environment. Members have collectively found the research group's membership to be valuable as it has helped to foster positive feeling towards research activities and it is not an obligation or a forced thing but something they enjoyed since the group is an occasion which makes it possible to do something about their research and more importantly, something they wanted to do. In fact, by participating in these research-based communities, effectively, individuals are learning about research by doing research and learning about their profession by interacting with the academic community as they progress into the community. This implied that as individuals participate they gradually learn and see themselves as academics or researchers and the activities in these research-based communities are situated because the sharing of insights is not simply a matter of transmitting information from one person to another but are translated from the context in which it was developed to the context in which it will be applied, which makes members' participation valuable.

It also implied that these research communities have provided a powerful means of socialisation, communication and camaraderie and in this sense, research is not only a scholarly activity but also a social activity as the meetings and activities have brought together individuals with similar interest crossing various boundaries as well as satisfied their needs for affiliation and provided the sense of involvement in an activity of long term importance. In this way they are not working in their isolated

behaviour and this is valuable as they get alternative perspectives where distinctive individual knowledge is exchanged, evaluated and integrated with others thereby moving individuals from observation to experiencing it and shifting from individual research to community research as well as from discipline-based to inter-disciplinary research. Also, working in an autonomous environment, what individuals did together and what they shared with each other went beyond the typical, common forms of their professional discourse which resulted in new research ideas.

Therefore, these findings suggest that these research-based communities are indeed viable vehicles for promoting research, for professional socialisation into the greater community of educational research and an alternative venue for professional development and they should be promoted as such vehicles in the HE environment. The way it has helped participants in this research implied that these research communities can improve individual's research capability or their work in a more efficient, effective and enhanced manner and by extension, benefits the institution. These perceived values are interrelated because to be of value, they are value themselves and they do not impact on one single aspect but have benefited and impact individuals in many and different ways because as stated in the literature, value lies in the eyes of the beholder, and in this case, depending on the individual; other members or the context of the research-based CoPs; the internal research environment of the university; as well as external research environment in HE. Thus, the four aspects i.e. personal, professional, intellectual and social impact, are not mutually exclusive; they are intertwined and impact each other. This implied that individuals need to be studied as a whole in terms of how they make sense of their

world which is consistent with the philosophy and paradigm of this research. Hence, it can be seen that this is a complex process and this is as illustrated in Figure 7.1.
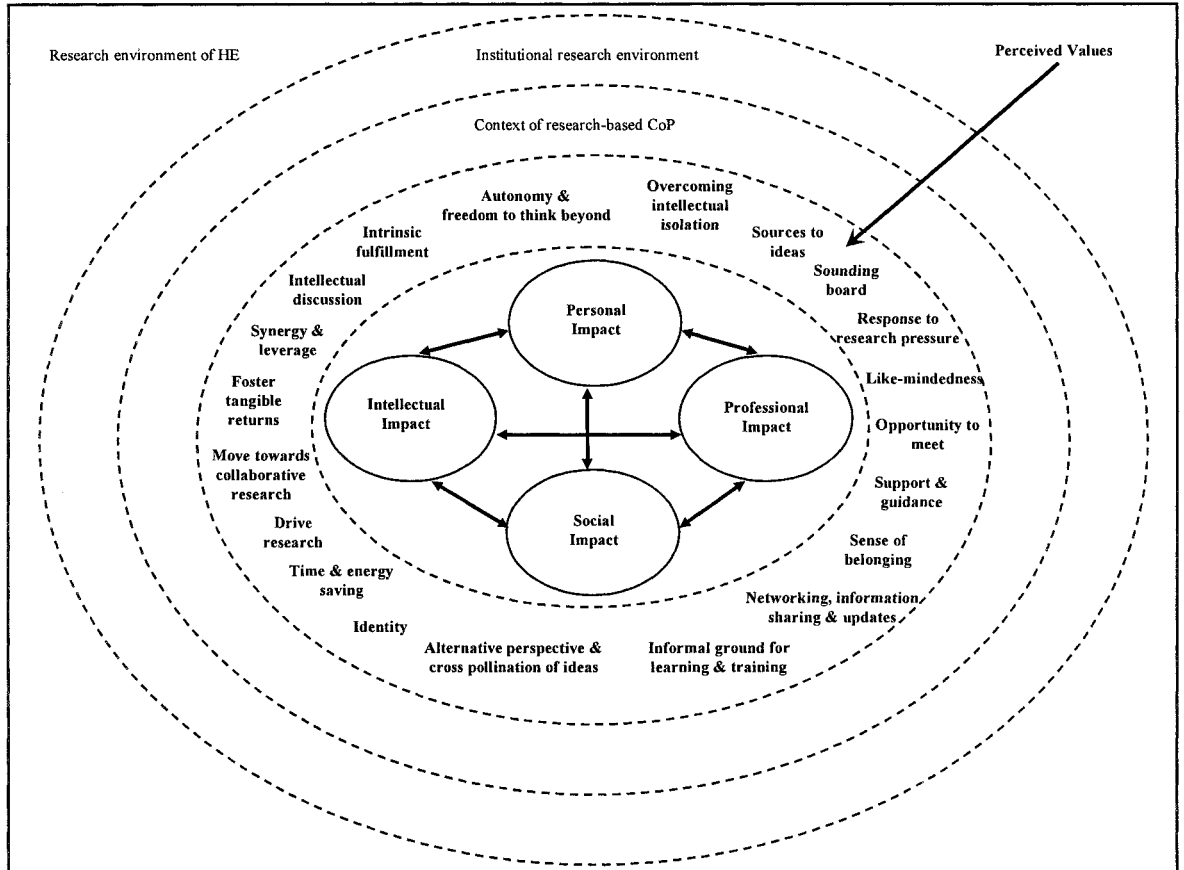

Figure 7.1: Illustration of Summary of Findings

7.2.2 Impact of membership

In validating each perceived value, individuals have explained how it has helped them and in what way it has impacted them. From their clarification, individuals have reflected these perceived values in several aspects.

- Members indicated that professionally, it has impact their work, career and their professional identity or status. Participating in these research communities enabled them to adapt and cope positively to the changes in the research environments as well as the research pressures from their institutions as they are

able to pull their resources together and they are seen stronger as a group. In fact, this allowed them to fulfil their research responsibilities and to stay at the forefront of their research as well as fostered tangible research outputs that have contributed partly to their performance appraisal as they are seen to be research active and this has brought their career forward. Also, by keeping in touch with a group of like-minded researchers, members shared and learned best practices from each other in terms of research strategies and process, their research interest and the academic profession, and this helped them to improve their research and work and they are more effective and efficient as these activities save them time and energy. Apart from this, it created various opportunities for career move or career advancement. In essence, these activities allowed them to build their career, research profile and enhance their academic reputation as well as taking their position in their professional community and exercising their duties and responsibilities thereby building their identity as an academic and a researcher.

- Intellectually, it has impact individuals in terms of learning, development and increasing their knowledge. In fact, members are learning to do research by doing research and learning the profession by participating in the academic community. Moreover, these research communities are safe places where they can bounce off and exchange ideas, enabling them to be more creative in their research. They can get useful feedback and alternative perspectives which increased their knowledge and expertise and gave them a broader view of the subject matter as well as the research environment in which they operate in. These ongoing discussions enable individuals to share information and updates enabling them to learn the latest advancement and to stay at the forefront of their

field as well as hands-on experience or the tricks of the trade which is tacit and available from individuals' experience.

- In terms of social impact, individuals have built personal and collegial relationships between each other and this enabled them to know each other not only conceptually but also personally. Therefore, they are personal as well as intellectual friends who are companions in their research, personal as well as professional life. These relationships gave them a sense of community-ness, a sense of belonging or having an intellectual home where they can meet to talk about research, share their practices and their personal feelings, helping them to overcome isolation or loneliness in their work.

- Individuals also mentioned that personally, since joining these research communities, they have increased confidence in themselves and in their research. They felt more motivated to do research and this enabled them to realise fully their own potential thereby instilling feeling of self-actualisation and boosting individual's self-esteem. Additionally, their relationships have made support and guidance available when they needed help or assistance. In this way, work becomes more meaningful, as there is a balance between work and life.

In summary, members have confirmed twenty perceived values of research-based CoPs, twelve of which are supported by past organisational research, but mirrored also in HE. Although, there are some similarities in these twelve perceived values, they have benefited and impacted on individuals in their own way. The other eight perceived values have emerged from doing research in the HE sector and provide new insights not previously discussed. Additionally, individuals have confirmed that their membership has benefited them not only in terms of research, but also impacted

them in many ways both personally, professionally, socially and intellectually. Moreover, even though this research set out to look into an individual's perspective of the value of CoP membership i.e. individually focussed, the findings have revealed that individuals are not only concerned for themselves i.e. self-preservation and self-interest), but they are mindful of the organisation as well and they see themselves as contributing to organisational research. Thus, although academics may have initially joined for personal or institutional reasons, upon retrospective reflection, individuals have found that it not only impacts on their work, but that of the organisation too. This is an unexpected by-product of the research.

In essence, membership of research-based CoPs is indeed valuable to individuals doing research in HE, and the HE sector in general, but also confirms that the HE institutions are benefactors of research-based CoPs both in terms of enhancing and improving research, and an alternative avenue for professional development. Therefore, the research findings have highlighted that research-based CoPs have a real role to play in HE, having significant, yet distinct, effects on research in HE. It has also revealed where CoPs fit in HE and the role they play in carrying out research which has not previously been acknowledged, as well as confirming the contribution CoPs make in developing individuals.

In other words, researchers involved in CoPs are more aware of the benefits of CoPs and consciously use them to enhance their research as a form of continuous professional development. As a vehicle to have a significant impact on, and to foster and develop research activities in HE, it is important that universities recognise CoPs and use them as foundations for further development in research as the perceived

values and impact of CoPs are influenced by how individuals make sense of their interactions in the context of these research groups, which are in turn influenced by the institutional environment as well as the wider context of the research environment in HE. It could be argued that they depend on each other and this relationship permits the independence of individuals through participation via the interdependence of research practice.

7.3 CONTRIBUTIONS OF THE STUDY

In reviewing the CoP literature throughout this study, the researcher gained valuable insights and also found some gaps to which this study's findings are pertinent.

- The importance of this study is not that it contradicts existing research – it does not. In fact, the outcomes are related to many of the ideas encountered in the sections dealing with the literature. It is because it illuminated critical areas in HE and CoPs that have been neglected and suggests a fresh theoretical context for existing findings and for future inquiry. Moreover, besides CoPs literature, this research has put together a diverse body of literature which has seldom been put together in this manner before i.e. learning and reflective practice, value, perception, perceived value in the marketing context and the HE literature. This juxtaposition of literatures has enabled further understanding of CoPs, the complexity and subjectivity of values, and research in the HE environment, in essence the research topic.

- In reviewing the literature, it revealed that in the past, the CoP literature has concentrated much on its benefits to organisations and there is scant literature on CoPs' benefits to its members. This study has extended the CoP concept by gaining more insightful understanding of why individuals participated in such

groupings and the value they derived from membership. This is significant because for CoPs to be successful and to be beneficial to organisations, members need to find their participation worthwhile. In order to gain insights into the value attached by individuals to CoPs' memberships, this study has explored CoPs from within, from the retrospective reflection of members themselves. Only then will the benefits of CoPs' membership be fully understood.

• Additionally, there is paucity of research on CoP pertaining to doing research in the HE environment. While the CoP concept has been examined extensively within the business context, very little is known about how they may benefit educational institutions. Past research has focussed on CoPs for the purpose of teaching and learning in HE but it was never for the purpose of research. This research has extended the CoP concept by applying it in the HE for the purpose of doing research and has demonstrated that the CoP concept is very real and is a valuable mechanism to encourage and enhance research activities as well as enrich research capabilities. It also suggests that CoPs are an alternative venue to gain useful knowledge and foster continuous personal development outside the formal hierarchy and the formal training structure. This has impact individuals in many ways i.e. personally, professionally, intellectually and socially.

Generally, a CoP is more based on pragmatic and problem solving but here, in the case of this research, it is pragmatic towards research, expansion of knowledge and acknowledging each other's knowledge. This is realistic in HE environment because it is not transfer of knowledge as in actual or formal teaching but sharing and acknowledging each other's knowledge, self development, and developing research in HE context. These are the unique characteristic in HE which is not fully embraced

in the CoP literature. Therefore, the contributions of this research are it has drawn on a wide range of literature put together in a unique way; has extended the CoP concept by looking into the benefits of CoPs' membership towards individuals, instead of towards institutions; and it has extended the concept by applying it in the HE for the purpose of doing research which was never conducted in the past research. Above all, it has provided insights and raised awareness of the values of research-based CoPs' membership to individuals and also to organisations. Based on the findings of this research, the following sections will look into its implications towards individuals as well as institution and will make some suggestions for further research that relate directly to HE. It needs to be highlighted that the researcher does not seek to generalise but wish to relate how these findings can be extended to a broader context or a similar context to other persons, times or settings than those directly studied in this research.

7.4 IMPLICATIONS FOR INDIVIDUALS

This research has helped participants recognise and identify the values CoPs' membership can offer. The research process has assisted participants to unravel the complexities of their experiences and reflect retrospectively with a focus on the values and impact of their membership. It is through these reflections, participants make sense and are more aware of the benefits and impacts a CoP can offer. The outcomes have indicated that most members have found the research-based communities to be valuable and they have impact them in many ways. Through these reflections it has guided individuals' behaviour and future actions pertaining to their participation and their research and will consciously use CoPs as a mechanism to gain knowledge and to stay at the forefront of their discipline.

However, it needs to be emphasised that these values and impacts are not realised based on a single meeting but extended over several meetings to make up the experience. This is because there is value in the LPP concept in these research communities and it enables members to participate on an ongoing basis at various levels to learn how to become full members. Then only would they realise the potential benefits a CoP can offer. This implied that engagement in these communities is not limited to experts. As seen in this study, it is not only for active or senior researchers but also for students, practitioners, novices and individuals who are not affiliated to any institutions. In fact, they embrace individuals who are at different stages of their development as researchers and they are opened to anyone who is interested in topic, issue or inquiry at hand. Therefore, the less experienced individuals are encouraged to join to gain knowledge and nurturance from the experienced members but this does not mean that the senior researchers do not benefit from participation as this study shows that learning is both ways, senior researchers learn as they reflect and refine their practice while helping the novices and get new perspectives novices bring in. This means that learning is situated and embedded in their participation and the knowledge gained from these communities are seen as practical and hands-on which cannot be found elsewhere.

Hence, from the testimonies of the participants, the research-based group's membership is recommended to those who wish to embark onto research or to become more research active. The findings indicated that they do not only impact members in terms of research but also benefited them personally, professionally, intellectually and socially. They create alternative venues that are exciting and exhilarating to work in and provide the support needed for research and work. It will

also expose members to their professional or research community's practice, perspectives and ways of communicating that will help members to be constantly aware of any developments within their particular disciplines and professions, thereby staying at the forefront of their professional fields. These are vital characteristics that need to be embraced by academics in the HE environment and these research communities offer individuals the opportunity to be responsible for themselves to further their own research and professional development.

7.5 IMPLICATIONS FOR ORGANISATIONS

By understanding how communities deliver benefits to individuals it is hoped that these findings will be able to clarify and target potential management interventions that will be most likely to support community formation and development as well as recognising their contributions. This is because this study has suggested that a CoP is a valuable vehicle to promote and develop research as well as individuals in the context of HE. The support and recognition of universities towards these research-based communities is necessary due to the following reasons.

- These research-based communities have led to improve research in terms of quality and quantity as well as sharing best practices to improve work in their formal workplace. The results of this study should change the views of universities towards these research communities as there is a tendency for institutions to view talking as socialising and detracting from work but this research's results suggest the opposite that is, these research communities are not mainly about discussions but by engaging with each other they talk about research or work and put things into actions. In fact, these research communities are mechanisms to encourage academics to engage in research as part of their

defined duties and it will ensure that they become and remain acquainted with research activities.

- The research activities in these groups enable individuals to continuously refresh and transfer skills and knowledge throughout institutions. They are seen as alternative venue for members to be responsible for their knowledge and for their continuous professional development that is pertinent for knowledge workers within HE.

- The findings in this research revealed that nowadays, the critical space for research is not within universities but between universities. Moreover, to do research in a global economy and with the increasing complexity of research, universities should capitalise on CoPs' capacity to cross boundaries or disciplines and also their research improvement or capacity benefits.

- The research groups are places where individuals learn about research by doing research. This means that it can assist universities in developing research as research will be conducted within collegial clusters or partnerships defined by a mix of experienced and new researcher where novices can continue to be attracted to research and senior researchers continue being active in research. In this way, research and learning is across levels of expertise rather than within them. This increases individuals' research capability and by extension, improves the credibility of the institutions. Hence, this communication of knowledge and continued intellectual growth is a necessary condition for any vital academic culture as well as to instil a vibrant research culture. Also, for universities that wish to enhance research, the concept of CoP is a very real and a potentially valuable mechanism to encourage research activities.

- From the findings, these research-based communities are able to provide values that are not only extrinsic but mainly intrinsic which is difficult to fulfil in the institutions. This is because they cannot compel enthusiasm and commitment from knowledge workers. Thus, these research-based communities are tools to motivate and to promote a high morale for research and they are powerful arenas where individuals' motives and institutional goals coincide in the pursuit of prestige – a win-win situation.

Thus, it is suggested that universities should make explicit efforts to encourage the development of new CoPs or to cultivate existing CoPs by giving them space, tools and encouragements to develop both on a personal and organisational level. It would become difficult when there are no homerooms where members can periodically gather to share stories and find partners with whom to collaborate. Also, universities should openly acknowledge the contributions that CoPs make within the universities because when cultivated successfully, CoPs can foster a knowledge sharing culture and enrich universities' research capabilities.

However, the successful cultivation of CoPs requires a fine balance between giving them enough support and direction to ensure their value, while at the same time not imposing too much structure and therefore risking losing the informal social relationships that underpin their effectiveness (NeLH, no date). These communities need supportive structures to ensure the latitude to collaborate, communicate and learn together across institutional boundaries, specialist domains and different levels of knowledge. The challenge is to nurture the development of these research-based CoPs within the more formal and rigid structures of the formal university. In return,

they can make commitments for development and delivery of value in research. These commitments should be not so much promises for which they are held to account but more of mutual expressions of commitment with reciprocal supporting structures (McMaster, 2000). This implied that communities cannot be measured and managed in conventional ways because it will not likely be able to appreciate the creativity, sharing and self-initiative that are the core elements of how a community creates value to its members and to the university (Wenger *et al.*, 2002a).

Hence, these research-based CoPs ought to be supported as vehicles to promote and develop research as well as research capability; as alternative venues for continuous professional development; and as a place for professional socialisation. Additionally, universities should acknowledge the power of community and adopts elegantly minimal processes that allow communities to emerge. Though CoPs cannot be developed, they can be designed for, encouraged, supported and formally recognised for their contributions. Thus, universities should acknowledge and cultivate CoPs within the institution because in doing so, they are in effect cultivating a community of scholars that are motivated and take responsibilities for their research profile, thereby increasing university's status and reputation in research. In essence, these communities play an increasingly central role in developing research in HE and they are remarkable and powerful vehicles for fostering a healthy and vibrant research culture in the HE environment.

7.6 LIMITATIONS OF RESEARCH

Every study has limitations (Taylor-Powell and Renner, 2003). Therefore, before identifying some possible avenues for future research, this section highlights some of

the limitations of this research. One of its limitations is that the findings are not generalisable (as mentioned in Section 4.7.4). The findings of this research affords a window into the perceived values and impacts of research-based CoPs in the HE sector but they are isolated to the research groups that have participated and are limited to the disciplines covered in this research as the HE is made up of multi-disciplines that differ in their nature of approach. However, the qualitative approach undertaken will contribute to thick and rich data that gives an understanding on the phenomena under study together with the context of this research so that reader can decide and make their own generalisation. It is believed that there may some commonalities but they cannot be generalised across the sector or disciplines.

Moreover, this research has focussed on the values, the positive effects of research-based CoP's membership but not the negative effects. In all things, they have their pros and cons and thus the researcher acknowledged that this is another limitation. As indicated in Section 2.6, CoPs may not produce positive impacts and may not always be suitable in organisations as they are contextual. Therefore, it is acknowledged that what is beneficial for one CoP may not be beneficial for another. Additionally, the main focus is not on the research groups' activities or its dynamics even though it is believed that these made up the experiences of participants. However, they have been considered when interpreting the data. Hence, instead of covering everything and study these groups on the surface level, the researcher has only zoom in into the benefits of the membership so that more insights can be gained. Also, it makes this research more manageable within the time constraint.

7.7 POSSIBILITIES FOR FURTHER STUDY

The body of knowledge of CoPs is growing rapidly. This study's findings contribute to that body of knowledge by providing insights into the ways CoPs' membership helps individuals improve their research in the HE context. In addition to gaining insights of the value of CoPs' membership, this study's findings may serve as an underpinning for future research focused on developing much-needed frameworks and guidelines that support careful nurturing of CoPs in HE institutions to encourage and enhance research or other professional development activities. The following are implications for further research that emerge from this study.

- The findings have indicated that the quality and value of the collective experience of participating in these research communities depended on how fulfilled and satisfied members felt and this depends on the mix of people, the quality of members, its context and its activities. These may be issues related to membership makeup, the attitude or behaviour of members, location of members, its activities and other factors that impact the value of membership. Therefore, further research to study on the dynamics and make up of CoPs is necessary to come up with the contingent factors of a successful and an effective CoP.

- It is also suggested that further research can be conducted to find out if the size of CoPs impacts the value of its membership. The researcher noted that the targeted research-based communities were fairly small in comparison to CoPs in other organisations mentioned in the literature and wondered if a CoP's size impacts its value to help its members in doing research. Hence, more research is needed to determine if the size of a CoP positively or negatively impacts the value or the amount of research support that CoP members receive, the communication methods they use and the types of activities they engage in.

- Further research can also study CoPs with no face-to-face interaction i.e. virtual CoPs who only interact via telephone and online communication. The CoP members in this study mentioned that their face-to-face interaction was a significant contributor to their membership's value because it allowed them to build personal relationships with one another, communicate simultaneously with all members about specific issues or learn about the other CoP members and discover their interests, strengths and weaknesses. These benefits added to the CoP's ability to positively impact the membership's value. It would be useful to research a CoP that has no face-to-face interaction to study the membership's value, even without the means of face-to-face communication. More specifically, how the values of membership in a virtual CoP differs from the values of membership in a face-to-face CoP how virtual CoPs impact members' research.

- In this research, it is observed that individuals are not only members in one CoP but several of them. Further research should study how many CoPs an individual might participate in and whether or not membership in one CoP conflicts or supplement with membership in another CoP. It would be beneficial to study how these CoPs overlap one another in terms of membership, how many CoP members participated in and how overlapping membership impact CoP members' participation. It would be interesting to determine how these memberships in multiple CoPs affect individuals' perceived values and their impact to research.

- This study has conducted research in various disciplines and found that membership is valuable in terms of doing research. The researcher believes that studies within disciplines other than those selected for this research may reveal similar findings but does not know for certain if that would be the case. The researcher feels it would be valuable to conduct a similar study within other

disciplines e.g. the scientific discipline where information is not shared so freely to protect their formulas or work, to determine if researchers arrive at similar conclusions about CoPs' membership and their positive impact on research.

- Due to the purpose of this research, it has only investigated the values of CoPs' membership. Yet, there is always the other side of the coin i.e. the downside of CoPs. Thus, future research should also study the limitations of these research-based communities in the context of doing research in HE.

Given these implications for further research, there is a great need for empirical studies on how these research-based communities work, how they are beneficial or not beneficial and where they need improvement. This will lead to further discovery about the value of its membership and the way it can impact its members.

7.8 CLOSING COMMENTS

As the community and the context by which the community exists continue to change, individuals' perceptions of the values and impact of its membership will be constructed or re-constructed at different phases of their participation. Indeed, this sense making process is complex but it has been fascinating for both the researcher and the participants. At this final note, looking back and thinking about this journey and its learning process, it has impacted the researcher in several aspects similar to the findings of this research i.e. professionally, intellectually, socially and personally.

Going through this journey has enabled the researcher to have a broader picture of the research and academic world. It has been fascinating to talk to individuals and to try understanding their research and the obscure areas they research in. Also, it gives

the researcher knowledge about research in the wider context, the forces, the politics and the complexity of doing research. Having a chance to talk and to interview these researchers has been awesome as it has been a pleasure to listen to their experience, their personal journey and to learn the behaviour and attitude of an effective researcher. They were vocal and passionate in their concerns of their membership, the academic community and the research environment as a whole, articulating and expressing themselves well which has contributed to the success of this research.

Therefore, this research has opened up a whole new world to the researcher in which the learning of knowledge and skills will be useful for her future endeavours. Also, through this research, it has also helped the researcher to reflect on her own research community at the university and this has helped her to start appreciate and participate actively in her research community thereby consciously capitalising on the community, realising its values and impact. This has provided the researcher with emotional and moral support, gaining alternative perspectives and ideas as well as offer companionship in this research journey. Indeed, this has been a challenging but a very rewarding journey.

APPENDIX I

INTERVIEW GUIDE

Prior to each interview, the following is read: Firstly, I would like to thank you for giving me time for this interview. I will just go through the purpose of my research again that is to gain understanding of individuals' perceptions of the value they have gained from being a member in research groups in HE. The research groups that I am referring to are groups of individuals that have come together informally and voluntarily for the purpose of doing research. Occasionally they will meet to discuss about research, share research tips and etc. I hope the outcome of my research will help individuals make sense of the impact these groups have on them, personally and professionally. Thus, I am interested to find out what are your perceptions of the values that you have gained from being a member of this research group, that you are in. Why are these values seen as valuable and how have they helped you in doing your research. I would like to assure you that whatever that is spoken in this interview will be treated as private and confidential as names, institutions and affiliations will remain anonymous. This piece of work is solely for the purpose of my doctoral study and please let me know if you feel uncomfortable or would like to stop whenever you want. I will be recording the interview and taking some notes throughout the interview. Is this agreeable?

Introduction question. To start with, let me explain the purpose of my research.

Factual and contextual question. Can you start by telling me some information about who you are and how you have first joined this group? How long have you joined this CoP? How many members were there? How often do you meet? How regular have you been in the meetings? **(to gain data on group's context and individual's profile)**

Follow-up questions. Why did you join? What motivated you to join? What were your feelings when you first joined? Why? What are your feelings now? What do you think makes the difference? Why did you continue to participate? **(before and after effect)**

Direct question. What did the group do in terms of activities that have helped in your research? In what ways it has benefited you? Why? **(tangibles and intangibles)**. Can you tell me one situation/story where it has created benefit or value to you? Why? Would it be different if you did not join CoP? What happened in the past? **(Using CIT and storytelling to help individuals focus)**

Probing question (partly cross checking with literature). When you had a problem or when you were having difficulties in your research, do you go to the group for help? Why? Did they help you? Are the answers good? Updated? Available via other sources? What would you have done without the community's input? Has the group contributed to your personal knowledge? How?

Indirect question. Have joining the CoP helped your work/performance, your formal duties and responsibilities? Personally? Professionally?

Summary question. Is there anything else you would like to tell me about your experience in joining CoP, which I have not covered?

APPENDIX II

EMAIL FOR PRELIMINARY INQUIRY

Dear _____,

By way of introduction, my name is Lai Ling Ng. I am a PhD student at the Newcastle Business School at Northumbria University currently supervised by Dr. Jon Pemberton and Dr. X-Jian Wu. The area of my research is in exploring individual's perception of the benefits they have gained from joining research-based communities. I have spoken to _____ about my research and understand that you are an active group member in a _____ research group. I hope to talk to you about your experience in joining this research group to gain more insights into your perception of the value gained from this membership.

In the context of this study, these research-based communities refer to a group of individuals who have come together to do research. These individuals meet face-to-face occasionally to discuss about research, share research ideas, problem solving in research, sharing tips of research and other activities related to doing research. The outcomes of my research will help individuals to make sense of the impact these research groups have on them, personally and professionally in terms of doing research. This sense making process can help guide individuals future actions to consciously use these research groups to do research and these groups may appear to be an alternative venue for continuous professional development.

I would like to make an appointment to meet you in order to further elaborate on my research and to seek your assistance. It would be appreciated if you could kindly advise me on when will be the best time for you. I can be contacted via (the researcher's email address and telephone number) and would of course be happy to answer any additional questions you have about my research.

Thanking you in anticipation and I look forward to meeting you.

Lai Ling

P.S: My supervisors are willing to corroborate the contents of this email, should you wish to contact them: Their contacts are:

(Supervisors' name, email address and telephone number)

APPENDIX III

EMAIL FOR INTERVIEW APPOINTMENT

Dear _____,

It has been a pleasure meeting you recently at your research group's meeting and thank you for agreeing to talk to me about my research. I am writing to make an appointment to talk about your perception of the value you have gained from the membership of this research group. As explained, the area of my research is in exploring individual's perception of the benefits they have gained from joining research-based communities. In the context of this study, these research-based communities refer to a group of individuals who have come together to do research. These individuals meet face-to-face occasionally to discuss about research, share research ideas, problem solving in research, sharing tips of research and other activities related to doing research. The outcome of my research will help individuals to make sense of the impact these research groups have on them, personally and professionally in terms of doing research. This sense making process can help guide individuals future actions to consciously use these research groups to do research and these groups may appear to be an alternative venue for continuous professional development.

The meeting should take less than an hour and the contents of the meeting will be kept private and confidential and anonymity will be maintained. It would be appreciated if you could kindly advise me on when will be the best time for you. I can be contacted via (researcher's email address and telephone number).

Thanking you in anticipation and I look forward to meeting you.

Lai Ling

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