"Barriers to knowledge sharing in third sector social care: a case study"
by Lyndsay Bloice and Professor Simon Burnett

Introduction

This paper examines the potential of knowledge management (KM) as a tool for service delivery outside the private sector using a case study methodology in order to identify the barriers to knowledge sharing (KS) in a social service, not-for-profit organisation (SSNFPO) in Scotland. The study aims to present a revised set of barriers for this third sector context, and ultimately to explore a case where KM is embedding beyond its original private sector focus. Much of the KM literature focuses on the management of knowledge in competitive, for-profit industries, and as such, the language used to describe both the theory and application centres on this type of business context. SSNFPOs then often develop their own definitions of what KM means for their organisation and adopt a customised approach (Hume and Hume, 2008; IRISS, 2012; Hume and Hume, 2015). This paper attempts to highlight this issue, and presents ways in which existing KM terminology may be used more effectively to reflect this context through an examination of barriers to KS specifically.

The UK Government defines the third sector as: "non-governmental organisations that are value-driven and which principally reinvest their surpluses to further social, environmental or cultural objectives, including voluntary and community organisations, charities, social enterprises, cooperatives and mutuals" (Cabinet Office, 2007, p5), while the Scottish Government expands their definition to include individual volunteers (Findlay, 2012). As such, this sector encompasses a huge variety of organisations. It has been suggested that with less money available to provide public services, the third sector can play a positive role in helping to deliver these. In particular, the third sector in Scotland is increasingly important to the delivery of social and health services to the public, and it is: "in some ways better equipped to overcome challenges facing public sector health and social care services" (Scottish Government, 2011, p8). However, the suitability of SSNFPOs in this role has not yet led to a concomitant growth of research in the area (Dickinson *et al*., 2012).

Whereas in for-profit organisations, knowledge is leveraged almost solely for competitive advantage to increase financial gain (Kong, 2007; Sillanpaa *et al.,* 2010), in a not-for-profit social enterprise which provides social care and services, KM may be applied to achieve additional organisational priorities, namely the sharing of good practice and increasing the body of knowledge in social care and the betterment of society (Kong, 2007; Guldberg *et al*., 2013). In the not-for-profit context, profit-making is only pursued if it can support the organisational agenda. However, these organisations still exist in a competitive environment, especially in the case of those competing with other providers to deliver social services to local authorities. As has been noted in other countries, one way for SSNFPOs to compete is to adopt commercial practices (including KM) in order to improve strategic performance. However, evidence suggests that directly applying for profit KM principles to the SSNFPO context is not straightforward (Hume and Hume, 2008; Hume and Hume 2015; Renshaw and Krishnaswamy, 2009).

The case study organisation

The organisation chosen for this case study was Scottish Autism (SA). SA is an independent charity, a social enterprise, and a private limited company which provides services for people with autism; defined as a lifelong, developmental condition that affects the way a person communicates, interacts and processes information (Scottish Autism, 2014). SA was established in 1968 by a group of parents and it now employs over 800 staff across Scotland to provide a variety of services to around 400 people. While SA is, at its core, a service provider, it is also a charity committed to working for the rights and quality of life of people with autism. The organisation does not strive to generate financial surpluses. However, it can (and does) pursue surplus-generating activities which either improve support for those living with autism, enabling them to make a positive contribution to the local community, or which contribute to the base of knowledge on autism (Scottish Autism, 2013).

It is important for the purposes of this paper to acknowledge the need for KM in the context of autism services. The autism spectrum refers to the range of ways the condition presents in an individual which can vary greatly from person to person and throughout their life (Scottish Autism, 2014). The "highly individual and complex nature of the autism spectrum" (Guldberg *et al*., 2013) means that there are a wide variety of considerations for autism practitioners looking at provision of services and care. Practitioners draw upon their knowledge of the autistic spectrum, including any published research they have encountered alongside lessons from their own practice experience and the practice experience of colleagues in order to deliver the level of care needed. Further, to deliver on their person-centred approach to service provision, SA relies on the customisation of this generalist knowledge "to the highly specific needs, skills and challenges of the individual" (Scottish Autism 2012; Guldberg *et al*., 2013).

SA operates in a competitive marketplace, and in this sense, the organisation has similar motives for the implementation of KM as with private sector organisations – namely that the organisation must provide quality services in a financially viable way: "While it may not be intuitively obvious, Knowledge Management is integral to the success of this organization… our collective knowledge is a strategic asset of the business and the principle source of sustainable competitive advantage" (Scottish Autism, 2012, p.7). The organisation must balance the requirements of their principle stakeholders, namely service users, parents and carers, and local authorities. For example, service users should have the opportunity to make choices, and the education and support needed to make those choices. Meanwhile, parents and carers look to SA for access to support, education and advice, and opportunities to engage with the autism community and share their experiences. Additionally, local authorities must be satisfied that the services offered are worth the cost (Scottish Autism 2013).

In 2010, SA adopted the public service improvement framework (PSIF) to align their quality improvement systems with those in local authorities - their primary funders. A KM strategy was then launched in April 2011 as a means to: "Build on and develop the significant body of practice knowledge that has accumulated across the organisation." (Scottish Autism, 2012, p6). However, the abovementioned frameworks and strategies were adopted following wider interest in the potential value of KM in health and social care at policy level, in particular, the implementation of the Scottish Government's first KS strategy for social services (NHS Education for Scotland and IRISS, 2010) and the more recent strategy and action plan for embedding knowledge in practice in Scotland's social services (Scottish

Government, 2012). It may be the case that with this increased focus on KM at policy level, there will be a trickle-down effect to other SSNFPOs and to the wider social care context.

SA explored the concept of barriers to sharing in the early stages of their KM project through a knowledge audit, which found that much of the valuable knowledge was in tacit form. The staff members on the 'shop floor' are practitioners tailoring services and care to individuals' needs; they are the intellectual capital (IC) within this type of organisation. This raised issues such as how to access and share that knowledge and the cost of losing such valuable knowledge due to staff turnover (IRISS, 2012). As such, in SA, KM processes had been implemented and tools had been used, but the strategy itself was still in its infancy. This served as a pertinent time to re-examine KM practices in SA and to further explore the KSBs following on from the earlier audit. Although the questions put to participants in the study covered the knowledge cycle as a whole within SA in an effort to holistically examine KM within the case study organisation, barriers to sharing were explored in particular in this case study in order to test both the most commonly cited barriers, and potentially to discover new KSBs experienced within a context largely under-represented in KM research.

Literature review

This section will briefly cover KM terminology relevant to the study and give an introduction to Riege's triad of KS barriers which forms the basis of the analytical template developed for this project, followed by discussion of KM and KS in relevant sectors including: the third sector; healthcare sector; social care sector and SSNFPOs.

Terminology and KSBs

Within the context of this research it is especially important to arrive at a definition of KS as this paper compares KSBs gathered from studies in various sectors, and as such the barriers identified may be affected by different definitions of KS. Some argue that the terminology is dependent on the researcher's definition of knowledge (Paulin and Suneson, 2012) while others claim that different sectors require and use more tailored terminology. For example, healthcare research uses the term knowledge translation, but it is generally limited to the process of finding relevant evidence for practice in published literature and applying it accordingly to affect change in service delivery (Ebener, *et al.,* 2006; Legare, 2009). In social care and human services research, the term knowledge integration is used to describe the process of combining knowledge from a wider variety of sources, including service users, in order to support the decision-making process involved in delivering services to individuals (Austin, 2008; Austin et al., 2008; Jang, 2013). This definition places emphasis on finding connections between tacit practice-based knowledge, critically analysed published research, and other data related to service outcomes and client feedback (Austin, 2008).

The analytical framework developed for this paper is heavily reliant on Riege's (2005) seminal review of barriers to KS. The term KS is used by Riege to denote sharing personal knowledge by guiding someone through thinking or using insights to aid in contextual understanding (McDermott, 1999; Riege, 2005). This definition not only emphasises the sharing of knowledge from one individual to another, but also the importance of sharing knowledge which will be meaningful and useful to the recipient (Riege, 2005). However, Riege uses the term knowledge transfer in a later paper which explores actions to overcome the same and similar KSBs, and he is not alone in using these terms interchangeably (Riege, 2007; Paulin and Suneson, 2012). For the purpose of clarity, the term KS is used throughout

this paper to denote the process of sharing and applying personal knowledge, published knowledge, and knowledge from other sources such as service users, in a meaningful and useful manner.

As mentioned, Riege's list of individual, organisational and technological barriers forms the basis of the analytical framework for this paper (Riege, 2005). Riege's list was developed by first reviewing a wealth of literature on KSBs in the management discipline, and then seeking to provide a more structured approach to the issue by sorting the KSBs into categories (Riege, 2005). Much of the earlier work on knowledge sharing barriers suggests, in line with Riege's findings, that knowledge sharing barriers are largely due to: individual barriers such as poor social interaction and lack of social network (Argote *et al*., 1990; Epple *et al*., 1996; Argote and Ingram, 2000; Cabrera and Cabrera, 2002); poor organisational culture and structure (McDermott, 1999; McDermott and O'Dell, 2001; Sharratt and Usoro, 2003); and technological issues such as reluctance to use new systems (Lettieri *et al.,* 2004).

Despite evidence of increased organisational performance through KM activities, measurement of this effectiveness or indeed uncovering the true cause of any ineffectiveness is proving to be problematic. There is an increasing body of work looking to identify actions to potentially overcome specific KSBs (Rivera-Vazquez, *et al*., 2009; Hong *et al*., 2011) and indeed, this is something Riege himself has also investigated (Riege, 2007). Further discussion on potential future research in this area is given in the concluding section. However, more recent work into KSBs and barriers to KM finds that some barriers are beyond the control of the organisation and management staff (Cabrera, *et al*., 2006; Singh and Kant, 2008; Wang and Noe, 2010) and that barriers such as lack of commitment to the organisation and general citizenship (Jo and Joo, 2011) and lack of or disbelief in a reward system (Gagne, 2009; Tohidinia and Mosakhani, 2010) continue to cause knowledge hoarding. Others have found that barriers change depending on the level of maturity of the organisation or its KM programme (Lin et al., 2012; Oliva, 2014).

The debate about the root of KSBs has been influenced by the continued discussion around whether KM and KS should be people-driven or technology-driven (McDermott, 1999; Cabrera, *et al*., 2006; Cheuk, 2008; Ragsdell, Espinet and Norris 2014). Cheuk (2008) describes the common perception that KM is simply a matter of technology implementation, and points out that KS systems or information systems won't solve all the problems, but that the real test is to "build an organisational culture which values and recognises employees who interact with information in order to grow the business and their own careers" (Cheuk, 2008, p139).

Subsequent small-scale testing of Riege's triad of barriers in the context of Australian multi-national corporations acknowledged that the list may not be directly applicable to public sector or other contexts (Riege, 2007). As such, many of the subsequent studies in this area seek to examine the applicability of the list in more specific contexts. Despite these limitations, Riege's triad of KSBs has been well cited and has been discussed and tested within various research fields and organisational contexts, including: IC, human resources, industrial management, service industry management, the learning organisation, workplace learning, organisational learning, project management, information science and systems, non-profit and voluntary sector, hospitality and tourism, public sector management, small businesses, economics and finance, engineering and construction management, higher education, and more. As is discussed in subsequent sections, many of these studies support Riege's findings, discovering common barriers to sharing despite varied organisational

contexts. This paper draws upon these studies in order to supplement Riege's triad of barriers and the following literature review discusses some of the more pertinent literature on KSBs with a particular focus on contexts relevant to the case study organisation and describes the subsequent applicability of Riege's list.

Third sector

The ability of third sector organisations (TSOs) to achieve their objectives often depends on the experience and skills of their staff and volunteers and therefore they may be seen to be 'knowledge intensive' (Hurley and Green, 2005; Hume and Hume, 2008; Renshaw and Krishnaswamy, 2009; Kong, 2010). Knowledge intensive organisations rely on IC, the knowledge of their workforce, in order to deliver their services or products rather than physical capital (Lettieri *et al.,* 2004). With this reliance on IC, it has been suggested that an increasingly competitive environment is leading TSOs to adopt strategic approaches, such as KM, to ensure sustainability (Hume and Hume, 2008; Renshaw and Krishnaswamy, 2009) and retain competitive edge (Hurley and Green, 2005).

However, there are considerable hurdles to managing knowledge in TSOs, including: high turnover of staff and transient nature of volunteer workers (Hume and Hume, 2008; Ragsdell, 2013); lack of operational maturity (Hume and Hume, 2008); lack of opportunity to plan strategically (Ragsdell, 2013); and altruistic organisational objectives vying with competitive organisational objectives (Kong, 2007; Hume and Hume, 2008; Kong, 2010). These barriers are not reflected in Riege's list, which focuses on the for-profit environment.

If any management model is to be successful, the model must be rooted in the language of the individuals who belong to the organisation, and it must be communicated and achieve 'buy-in' by individuals at all levels of the organisation (Kong, 2010; Viader and Espina, 2014). Therefore, it may be said that KM models must be adapted to suit the organisational context and that barriers to KM and indeed KS, could arise from a lack of common language or sufficient adaptation. Some work has been conducted in this area in order to aid this transition from private to third sector (Hume and Hume, 2008; Hume and Hume, 2015; Hume *et al.,* 2012a; Hume *et al.,* 2012b). However, there is still a paucity of KM theory-building in this field, and examination of the practicalities of implementation.

There are, though, some studies into the application of KM specifically in the voluntary sector and these have found that KM is often less focused on technology or strategy, rather, on KM as developing a sense of community, and as putting teams in touch with others who have faced similar tasks or projects (Ragsdell, 2007). This may have implications for the types of barriers seen in these organisations, where technological barriers are not observed or are changed as there are no KM type technologies in place. Riege's list, in the context of the voluntary sector, lacks adequate reflection upon culture and includes many technological barriers which may not be applicable for voluntary organisations.

It is suggested that the specific nature of TSOs may in fact support KS practices and support a person-centred approach to KM; an example of which would be shared ethos (Renshaw and Krishnaswamy, 2009; Ragsdell, 2013). Where TSOs are striving to create social value, not just for their stakeholders, but for the wider community and society, the shared vision may lead to motivation for sharing knowledge externally rather than simply within the organisation for the purposes of profit (Passey and Lyons, 2006; Renshaw and Krishnaswamy, 2009). This, in turn, has implications for the ultimate aim of KM programs in

TSOs. If the goal of TSOs is to contribute to society, they must balance the need to thrive in a competitive sector with the desire to achieve their social improvement goals. As such, it may be expected that Riege's barriers which cover external and internal competitiveness in the for-profit sector would be less apparent in the TSO environment.

However, the competitive nature of some TSOs means that the opportunity for sharing knowledge between organisations could be lost, even when it comes to collaborating and sharing knowledge about how to replicate successful KM results, which is an inefficient use of already scarce funds (Hurley and Green 2005; Passey and Lyons, 2006; Renshaw and Krishnaswamy, 2009). We may see similarities with the KSBs in private organisations concerned with hoarding knowledge as it is too valuable to both the individual and the organisation. Some suggest that it is the role of TSOs to encourage KM processes within their own walls, and it is for the funding agencies to motivate them to collaborate and share knowledge with each other (Hurley and Green 2005).

Healthcare sector

KM is developing strongly in the healthcare sector, and is being re-conceptualised to accommodate the differences in organisational contexts (Nicolini *et al.,* 2008; Lin *et al*., 2008). The language used to describe these KM efforts is a clear example of this, where: "Instead of knowledge transfer, social capital and community of practice, in healthcare one finds practitioners and researchers discussing forms of evidence, KT and managed networks" (Nicolini *et al*., 2008, p258). Whereas KM in private organisations has roots in management theory and was developed by practitioners and academics looking to improve organisational competitiveness in the knowledge economy while addressing staff turnover and globalisation, KM in healthcare is often considered to be the next step up from the information-intensive focus of evidence based practice (EBP) (Nicolini *et al.,* 2008; Lin *et al*., 2008).

Many of the KM practices in the healthcare sector have evolved independently of the private sector, but have a number of similarities (Nicolini, *et al.,* 2008). An example of this would be 'clinical governance', which is aimed at integrating the activities which may impact patient care including: better information management; collaboration; and evidence from research. Clinical governance may be seen as an application of KM by another name (Nicolini *et al.,* 2008). While the language used to describe the processes, tools and activities may be different, there are striking similarities between the two approaches to KM. However, it has been noted that KM in healthcare has been excessively focused on integration of evidence for practice from published research (Myllarniemi *et al.,* 2012; Sibbald *et al.,* 2013) rather than on sharing best practice and leveraging practice knowledge. This may be considered a barrier to KS, as there appears to be less trust in practice knowledge than in knowledge gleaned from research (Nicolini *et al.,* 2008; Lin *et al.,* 2008).

This approach to KS, where the knowledge being shared is predominantly explicit, may have implications for KM implementation and development. For example, where explicit knowledge is the focus for an organisation, 'hard' factors in KM such as technology may be prioritised. However, in organisations where tacit knowledge is deemed to be of sufficient value, a 'soft' factor such as culture may be a priority. One of Riege's individual barriers directly relates to this predominance of sharing explicit knowledge rather than tacit know-how (Riege, 2005, p.23). It may be that with the continued development of KM in

healthcare, there will be a move away from sharing explicit knowledge and greater focus on the often more difficult task of managing tacit knowledge.

KSBs discussed in healthcare which are not evident in Riege's list include: fear of formalisation and traceability of previously informal conversations (Nicolini *et al*., 2008); external pressures from government-set performance indicators and interference in clinical networks leading to uncoupling of research and practice and lack of motivation to use networks (Nicolini *et al*., 2008); complex multi-professional and multi-level nature of the sector (Nicolini *et al*., 2008); and difficulty in concretely expressing complex medical knowledge (Lin et al., 2008; Nicolini et al., 2008).

Social care sector

The social care sector has its roots in charitable and philanthropic endeavours of the past (Gray and Schubert, 2013). In this sense, the sector has much in common with the TSOs of today. However, this early role in society has given way to the influence of social policy and institutionalised welfare (Gray and Schubert, 2013).

At the core of the current debate around KM in social care is the idea of what actually constitutes social care knowledge. The knowledge base of social work may be described in terms of three interweaving features: theoretical knowledge (from study and research), factual knowledge (about the client or case) and practice knowledge (about how to deliver care or services effectively (Trevithick, 2008). However, there is much debate about which knowledge features should be given precedence, and how to manage these in order to arrive at a decision about practice (Trevithick, 2008). Some see KM as a useful bridge to cross the gap left by evidence-informed practice (Lee and Austin, 2012) while others claim that KM, especially the technology-mediated KM approach, may have restricted ability to enhance organisational effectiveness of social work agencies (Jang, 2013) if there is only focus on the research or theoretical knowledge.

This may lead to several KSBs, especially those dealing with uncertainty both in the sharer and receiver about the validity of the knowledge and lack of consideration of knowledge sources. Riege's list does reflect this to a certain extent in the barriers which cover trust in the knowledge source and lack of contact with the knowledge source, but it may not adequately reflect the complex balance of managing published knowledge, practice knowledge and the additional commitment to considering service user experience needed to deliver effective services in this sector (Watson, 2007b). Specifically in organisations which provide support for those on the autism spectrum, there is a need for not just KS, but incorporation of knowledge from a range of sources and subsequent expert application of knowledge into decision-making to effectively provide services and care for the individual (Guldberg *et al*., 2013). As such, a barrier to KS may be limited access to these sources of knowledge or lack of ability to give careful consideration to the knowledge available in order to apply it to decisions about care.

An additional barrier to KS, but ultimately to the entire process of KM, would be the question of how to implement and maintain KM in a social care context without the level of resource at the disposal of large healthcare organisations such as the NHS. This deficiency of resource as a barrier is also reflected in Riege's list (Watson, 2007a). Finally, a barrier not mentioned in Riege's list, but discussed in relation to the social care sector is the lack of a

toolkit or appropriate materials relevant to the context and the difficulties in adapting existing material to fit the social care environment and ethos (Watson, 2007a).

SSNFPOs

As mentioned previously, TSOs are considered to be knowledge intensive. This is especially true in SSNFPOs which rely upon IC as opposed to physical capital to retain competitive edge and which focus on delivery of services which require a skilled workforce (Renshaw and Krishnaswamy, 2009). In this organisational setting, KM is suggested as a way of unlocking best practice within the organisation and making it available to other staff. It is also a means by which application of knowledge in individual cases can be shared and discussed (Guldberg *et al*., 2013).

However in SSNFPOs there is a careful balancing act between satisfying funding agencies and satisfying service recipients (Kong, 2010) in addition to the danger of reinventing the wheel, where each SSNFPO is not only developing their own KM programme, but is separately working on the social issue which is the goal of the organisation rather than pooling resources (Kong, 2007; Kong, 2010; Stauss, 2007). It is suggested that collaboration, rather than reducing competitive advantage, could aid organisations and sharing of resources and mutual learning could lead to real benefits not simply for individual organisations but for the overall mission of the SSNFPO (Kong, 2010). It is also suggested that public sector reforms which intensify competition are destructive, in the sense that "SSNPOs are competing with each other for resources rather than working together to solve social problems" (Kong, 2010, p295). A barrier to KS here, and present also in Riege's list, would therefore be if there was limited scope to share with other organisations either through the competitive nature of SSNFPOs or through lack of contact with practice staff in other organisations.

Finally, as mentioned in the social care section, SSNFPOs and social service organisations must integrate knowledge from multiple sources in order to make decisions about care. A barrier to this process would be if there was a lack of mechanism within the organisation for allowing knowledge to flow from service-users back to practitioners. Lack of strategy involving both sharing best practice amongst staff members and allowing 'knowledge transfer backflow' from service users and carers or parents would be a barrier to effective KS in this context (Stauss, 2007).

Summary

The literature review has attempted to clarify definitions, highlight similarities and differences between sectors and review salient literature in the topic area. The literature makes the case for KM as a strategic method to manage practitioner knowledge, and one which would be particularly useful in the SSNFPO context. The lack of research in this area, coupled with the apparent need for strategic management of knowledge critical to the success of SSNFPOs supports the case for further study. The review also highlights the general applicability of Riege's triad of barriers to these contexts, but it additionally makes the case for an extension and reimagining of this list in order to more accurately reflect the third sector and other contexts. Several potential barriers both to KM implementation and to subsequent KS in the alternative contexts of healthcare, social care, SSNFPOs and TSOs were discussed, most notably including:

Individual

- Knowledge from practice considered less trustworthy than published research
- Fear of formalisation and traceability of previously informal conversations
- Uncertainty about correct balance of theoretical knowledge, factual knowledge, and practice knowledge in decision making

Organisational

- Transient nature of volunteer taskforce
- Lack of operational maturity
- Lack of opportunity to plan strategically
- Altruistic organisational objectives vying with competitive organisational objectives
- KM model has not been sufficiently adapted for context/lack of appropriate toolkit or materials
- Focus on sharing explicit rather than tacit knowledge
- Lack of feedback loop from service users and families
- Lack of support to share with other organisations

Technological

- Technology-based solutions not useful in a context which is focused on soft KM factors

Other

- External pressure and interference from government in KS practices
- Complex multi-professional and multi-level nature of sector
- Difficult to concretely express complex medical knowledge

The barriers will be discussed in relation to the case study organisation later in this paper.

Methodology

Case study design

A case study approach was selected as it allows for an in-depth examination of the barriers to KS in the case study organisation and examination of the meaning of activity, rather than simply measuring presence of or frequency of activity (Yin, 2009). As the study sought to gather perceptions from staff about KS behaviour in their organisation, the context is vital as these behaviours may be shaped by their environment (Gillham, 2000).

A case study which is intrinsic in nature, where the study is undertaken not to compare with others or to produce generalisations but purely because the particular case merits exploration (Stake, 1995), and which focuses on qualitative methods of data collection, helps to describe the subject of study as a complex system. Qualitative methods are geared towards gathering evidence from people about their interpretation of systems, and allowing the researcher to interpret those interpretations (Gillham, 2000). This study is an embedded single case design (Yin, 2009) which draws upon primary data from semi-structured interviews and a questionnaire, alongside published material from SA.

Limitations of the research design and the study

The main limitation of case study design is lack of generalisability. However, the case study method is chosen precisely for this reason; the intrinsic case study focuses on the exploration of a case and as such, the sampling technique becomes less important. The obligation is to understand this case, rather than to understand a phenomenon by sampling a number of cases (Stake, 1995).

Another limitation is lack of validity as a result of the influence of the researcher both in the interpretation of results and in the interaction with the case which is presumed to be unique and not reproducible for other researchers (Stake, 1995). In order to mitigate this effect, a good case study will use as many sources of evidence as possible within the scope of the investigation (Yin, 2009). Efforts were made to analyse annual reports, interviews given by staff, and other studies into the case study organisation. However, greater access to internal documentation and other organisational resources could have supplied a richer picture of knowledge practices within the case study organisation. Greater validity could also have been achieved by increasing the size of the sample.

Sampling

As discussed, the literature suggests that SSNFPOs are knowledge intensive organisations which are required to share knowledge in order to compete. Therefore, SSNFPOs were targeted as potential cases for examination into the barriers to knowledge flow in a unique context. In order to identify these organisations, the list of members on the website of the Coalition of Care and Support Providers in Scotland (CCPS), which is involved in the social care action plan (Scottish Government, 2012) was consulted. There were 71 organisations classed as social service organisations in the list, and these were analysed for signs of KM activity and currency of activity by examination of web presence and publicly available materials such as mission statements and annual reports.

SA was selected for a number of reasons: firstly, the annual report states that KM has been a focus in the past year, and will continue to be a key concern; secondly, there is evidence of KM related content on the SA website; thirdly, SA has launched a KM strategy (April, 2011); lastly, SA are in the process of further developing their KM programme, with the launch of communities of practice (CoP), and a researcher in residence who will help to draw out some of the tacit knowledge within the organisation. There were four other organisations of interest which could hold potential for future case studies.

In the preliminary stage of the study, interviews with a senior employee from SA were used to provide a background to the organisation and their knowledge journey. Probabilistic sampling was used to select the interviewees based on factors such as position, service, and experience.

Data gathering

Following discussions with the senior employee, the questionnaire was piloted and minor amendments were made to the wording. The questionnaire itself contained open questions, with no upper word limit and no requirement to complete every question. The questions focused on KS activities, opportunities and the knowledge cycle within the organisation and examples were given to staff to aid understanding. With the exception of one participant

failing to answer one question, every participant responded to all of the questions. Seventeen members of staff completed the questionnaire in total. The questions were:

1. When asked for your input on providing services to the individual user, which forms of knowledge do you draw upon to shape your response?

2. Describe the methods you use to share your knowledge about providing services to individual users.

3. Where are you able to share your knowledge about providing services to the individual user?

4. What would you say are the barriers to sharing knowledge about providing services for individual service-users?

5. How is knowledge sharing about providing services to individual users facilitated?

6. Describe an instance when there have been improvements to the services provided to an individual as a result of knowledge gathered from the staff team.

The focused interview (Yin, 2009) or semi-structured interview sought to discuss some of the themes emerging from the questionnaires. Some prompts were drafted prior to the interviews, but the flow of conversation often guided the next question and distorted any previously established order. This is a common occurrence in data collection of this type as each interviewee is expected to have a unique story to tell (Stake, 1995). The interviews were conducted by telephone with four employees, and they were recorded with the permission of the interviewees who were assured that their anonymity would be retained. The interviews focused on operational knowledge and reflected on the effects of culture, organisational structure and thoughts on the development of knowledge practices within teams and organisation-wide. Some thoughts on the wider implications of KM within SA were also discussed in the interviews along with the strategic reasons for implementation. The interview topics and probes were:

1. Purpose of KM within SA
2. Organisational structure
3. Organisational culture
4. Solutions for these issues
5. Knowledge storage and maintenance
6. Individualised care vs. best practice
7. What next for KM

Analysis and generation of findings

An analytical template was designed based on Riege's list, with the KSBs proposed in literature on KM and KS in other relevant contexts covered in the literature review added to additional columns, namely: healthcare (Lin *et. al.,* 2008; Nicolini *et. al.,* 2008); social care (Austin, 2008; Austin *et. al.,* 2008; Trevithick, 2008; Lee & Austin, 2012; Gray and Schubert, 2013; Jang, 2013); the third sector (Hurley and Green, 2005; Hume and Hume, 2008; Renshaw and Krishnaswamy, 2009; Kong, 2010; Ragsdell, 2013); and SSNFPOs (Stauss 2007; Renshaw and Krishnaswamy, 2009; Kong, 2010; Guldberg *et al*., 2013). Where a barrier was

represented in Riege's list but not identified in the other literature, the barrier remained within the template. Where a barrier was identified in the literature which was not reflected in Riege's list, a supplementary row was created within the relevant section (individual, organisation or technological).

Responses from both the interviews and questionnaires were sorted into a final column in the template, enabling the researchers to compare the presence (or absence) of KSBs. The number of responses mentioning a particular barrier were tallied in both the questionnaires and the interviews, but emphasis was placed on a search for meaning and understanding and to discuss the context in which the barrier was mentioned rather than to count the instances.

Findings and discussion

Individual KSBs

Many respondents started their list of barriers with 'lack of time' responses in line with Riege's individual barrier one: "General lack of time to share knowledge, and time to identify colleagues in need of specific knowledge" (Riege, 2005, p.23). These fell under three main categories, namely: lack of time due to nature of the job, where the focus of day-to-day work must be on supporting individuals; lack of time due to increasing workload; and lack of time due to having to train new staff and high staff turnover. Interestingly, two of the interviewees also mentioned lack of time to keep up-to-date with current knowledge of autism was a barrier to KS and this was found to tally with the health care literature (Nicolini *et al.,* 2008; Lin *et al.,* 2008). However, as mentioned previously, barriers are often not isolated and this individual barrier could be linked to organisational barrier five: "Existing corporate culture does not provide sufficient support for sharing practices" (Riege, 2005, p26).

Riege's third individual barrier: "Low awareness and realisation of the value and benefit of possessed knowledge to others" (Riege, 2005, p.23) was a much discussed topic in the interviews, but this barrier can also be seen in the questionnaire responses. Respondents commented that they did not believe they had anything to offer besides just doing their job, and were unsure if there was a right time and right place for sharing. Others commented that the concept of sharing knowledge had not seemed like a big priority until recently and that it was a new way of working which would take time to get used to. While many questionnaire respondents did mention that they participated in sharing events and recognised the value of such activities, some respondents were less convinced. The interviewees also highlighted this issue, where the challenges of overcoming this perception and this way of working were much discussed. This is somewhat in contrast to an earlier investigation into knowledge flow in SA, where researchers found that staff members readily recognise their role as knowledge creators (Guldberg *et al*., 2013). It is unclear why these findings are in contrast to the earlier investigation, however it could be due to the participants in the earlier study being early adopters, or that it took more time than anticipated for this lack of realisation and awareness to be identified within the organisation.

There were also several responses which align with the seventh individual barrier: "Differences in experience levels" alongside the thirteenth individual barrier which is "Differences in education levels" (Riege, 2005, p.23). Staff gave examples such as the limited autism specific training of new staff and lack of experience in the job. Where many staff

would be expected to have at least baseline level of knowledge about autism in order to do their job, there may be variations of training and experience across and between teams. This barrier was not mentioned in the interviews, yet it appeared in several questionnaire responses. Questionnaire respondents did not elaborate further on the reasons why varying levels of training and experience levels inhibited KS specifically.

One respondent mentioned a barrier in line with Riege's sixteenth individual barrier: "Lack of trust in the accuracy and credibility of knowledge due to the source" (Riege, 2005, p24). This respondent was concerned that records made by other staff members may not be accurate. This barrier was also represented in research into KM in healthcare (Nicolini *et al.,* 2008; Lin *et al.,* 2008), and social care (Trevithick, 2008; Jang, 2013), where lack of trust of certain types of documents or sources of knowledge was a barrier to knowledge flow.

Another set of responses can be compared to a blend of two of Riege's barriers to sharing, namely individual barrier six: "Insufficient capture, evaluation, feedback, communication, and tolerance of past mistakes that would enhance individual and organisational learning effect" (Riege, 2005, p23); and organisational barrier three: "Shortage of formal and informal spaces to share, reflect and generate (new) knowledge" (Riege, 2005, p26). One interviewee elaborated on these barriers, stating that they felt that within departments, staff had the opportunity to run things past each other and seek advice, but there was less time and opportunity to formally reflect on and capture stories and successes as a team. Another interviewee mentioned that, although records of individual cases were maintained, there was no organisation-wide sharing of that practice. The interviewee mentioned that there are highly documented care plans and records of approaches which have worked in the past for each individual, but there is no formal system for sharing that type of information and it would be difficult to share such material at an organisational level in an appropriate manner.

In fact, the barrier as described in the above responses which are focused on the difficulties when shared knowledge is not recorded and stored could also be likened to the fifth technical barrier: "Mismatch between individuals' need requirements and integrated IT systems and processes restricts sharing practices" (Riege, 2005, p29). For example, one interviewee states:

> "Sitting here right now, I'm thinking to myself: 'if I wanted to learn about something within SA, where would I go for it?' And would I know where to go on a database to find something? I think the answer to that would honestly have to be no. I would phone people, I would email people to say: 'do you have anything that could help me with this?' There's not a bank of information. It's probably all over the organisation in different pockets and teams, within different heads."
> – Interviewee Four

This again highlights the differences between sharing tacit and explicit knowledge. There is recognition here that the valuable knowledge within SA is rooted in the experience and skill of their staff rather than in explicit documents or databases.

Lastly, not explicitly mentioned in the questionnaire responses and interviews, but covered in a report on KM in SA is the geographical challenge. Around 850 SA staff are scattered throughout Scotland with "lots of staff doing similar work in different areas and who are probably meeting the same challenges… and they felt that they did not have sufficient

opportunity to know and understand that." (IRISS, 2012, p6). This could be linked to Riege's eighth individual barrier: "Lack of contact time and interaction between knowledge sources and recipients" (Riege, 2005, p23) which could be said to reflect the geographical challenge of sharing knowledge with distant teams.

Organisational KSBs

There were many responses which considered the organisational barriers to sharing. Some respondents simply stated that they perceived a lack of opportunity or training and opportunities were not facilitated frequently enough, which is similar to Riege's eighth organisational barrier: "Deficiency of company resources that would provide adequate sharing opportunities" (Riege, 2005, p26). Other responses were more aligned with organisational barrier six: "Knowledge retention of highly skilled and experienced staff is not a high priority" (Riege, 2005, p26). Examples of this type of response include those who were concerned with the lack of investment in the workers who have direct knowledge of the needs of service users, whether that be allocating time to them to participate in KS activities or providing cover for them to attend courses and knowledge events.

Respondents also noted that lack of a range of opportunities to participate was a barrier to knowledge flow, in line with Riege's third organisational barrier: "Shortage of formal and informal spaces to share, reflect and generate new knowledge" (Riege, 2005, p26). Some respondents and interviewees lamented the lack of opportunity to participate in meetings and group events and the lack of formalisation of knowledge generated during such activities. This would corroborate an earlier study into knowledge flow in SA, which found that: "Although reflection and conscious practice is established in the organisation, it has only recently become a strategic focus, and it is recognised that the missing component is the formal sharing of practice" (Guldberg *et al*., 2013). However, as in the barrier described by Riege, shortage of informal spaces to share can also be a barrier. While some respondents briefly considered the benefits of sharing within teams and with other co-workers, there was largely a focus on discussing more formal sharing opportunities. Perhaps lack of awareness of the value and benefit of informal sharing opportunities may be said to be a barrier to KS in SA.

Several respondents noted barriers around restricted knowledge flows, which is similar to organisational barrier ten (Riege, 2005, p.26): "Communication and knowledge flows are restricted into certain directions (e.g. top-down)". Many of the respondents referred to a lack of wider sharing, where knowledge is shared within teams or services and this is done well with regard to an individual's service, but the knowledge is often not shared more widely. Others commented that practitioners were sometimes excluded from steering groups and decision-making meetings, where their knowledge could prove useful. However, the interviewees noted that, historically, restricted communication flows had been an issue but that the situation had improved, with there being less of a disconnect between the practitioners on the floor and the KM development services and others in the head office. Certainly, another interviewee saw the recent attitudes towards sharing and developing good practice as facilitated and driven by senior management.

One of the questionnaire respondents mentioned the difficulties of sharing and gathering knowledge from outside organisations, where they find that between organisations there is 'red tape' or unwillingness to share. This respondent was unsure of the motives behind this unwillingness of inter-organisational sharing, and this barrier was not mentioned in other

responses. Riege's ninth organisational barrier could be to blame here, where: "External competitiveness within business units or functional areas and between subsidiaries can be high (e.g. not-in-here syndrome)" (Riege, 2005, p26) is a barrier to sharing. This barrier was also mentioned in the third sector literature (Renshaw and Krishnaswamy, 2009; Hurley and Green 2005) and SSNFPO literature (Kong, 2010) where the benefits of inter-organisational sharing were said to out-weigh the costs.

Both Riege's ninth and twelfth organisational barriers mention external and internal barriers respectively where there are difficulties in engaging in knowledge practices because of competitiveness. This highlights the potential dangers of sharing knowledge in private organisations. However, none of the questionnaire respondents or interviewees mentioned that they felt the need to guard organisational knowledge, rather, they were keen to share more widely as in the response earlier about the need to become known as a knowledge resource to enable SA to influence national agendas. Despite the questionnaire respondents and interviewees frequently mentioning the importance of exporting knowledge outside of the organisation for the benefit of the body of knowledge on autism, no mention was made of collaboration with similar organisations or service providers at a practitioner level.

Technical KSBs

Very few of the questionnaire respondents mentioned any barriers which could be directly aligned with Riege's technical barriers. However, one interviewee reported that the intranet was a barrier to finding and sharing knowledge. The interviewee mentioned that staff members type-in what they are looking for, and if relevant information does not appear, they give up. This would be similar to Riege's third technical barrier: "Unrealistic expectations of employees as to what technology can do and cannot do"; and also the fifth technical barrier: "Mismatch between individuals' need requirements and integrated IT systems and processes restricts sharing practices" (Riege, 2005, p29).

However, the interviewee also mentioned that there is sometimes a feeling amongst staff that they do not have the technological skills to get what they want from the intranet, whether this is to share, acquire or store information and therefore they avoid using it. This would fall neatly under Riege's sixth technical barrier: "Reluctance to use IT systems due to lack of familiarity and experience with them" (Riege, 2005, p29).

SA has focused heavily on the social aspects of KM, as this dovetails with the existing organisational strategy and social care ethos. As such, the technological barriers identified by Riege were lacking in this context, as in the literature on KM in social care, TSOs and SSNFPOs. The staff members in the case study organisation were more aware of KM as a social concern, and that sharing both at informal and formal events was the top priority, rather than implementation and use of technology. Many staff members were open to the idea of technology, but acknowledged that there were fundamental issues such as skill level and reluctance to use new technology that could potentially see low uptake of such features.

Other KSBs

This section outlines the other barriers which do not easily fit into Riege's categories. The first group of responses centres on how staff members feel about sharing. There was much mention of confidence to share in various formal and informal situations, where staff said

they were not sure if their views would be considered and they lacked confidence to put forward those views. While this may be related to Riege's third individual barrier, discussed earlier, which posits that low awareness of the benefits of sharing is a barrier, lack of confidence to share could be for a number of reasons. Fear of sharing is mentioned in Riege's second individual barrier which describes fear of sharing due to lack of job security, however, this concern does not seem to feature in the responses, in fact, many point to KS as a means for practitioners to better perform their job and to further their prospects.

This lack of confidence could be described as a further individual barrier, as it describes a scenario whereby staff members do want to share, and they see the value in sharing, but they do not have the confidence to stand up and share in a large room of people. This highlights the need for multiple methods of sharing knowledge and for the organisation to allow as many channels of communication as possible. This barrier to sharing also has wider implications, for example, solutions may need to be found if staff members do not feel confident enough to contribute in any sized group. Even if the organisation can provide other options for capture whereby there are fewer participants at a forum, it must be considered that fear of sharing may still be present due to other factors. The respondents seemed to focus largely on KS activities in formal settings, such as at large staff events or in smaller staff meetings. There was little mention of less formal opportunities and settings for sharing. Certainly it has been found that informal spaces for sharing facilitate knowledge flow (Ragsdell, 2007).

One response highlights the need for practitioner awareness about the rich sources of knowledge available to them, stating that a barrier to KS is not knowing that specific knowledge is available. This may be an individual barrier, where a practitioner is simply unaware of where to find specific knowledge or that such knowledge exists, or it could be an organisational barrier, where the organisation does not advertise its knowledge opportunities to staff. It is apparent looking at the external website, that SA does advertise resources such as videos as a resource for parents, but perhaps more could be done to advertise internal opportunities. A recent study in this area found that 'internal marketing' was a key enabler of KM in not-for-profit organisations (Hume and Hume, 2015). However, another response indicates that even greater promotion of knowledge resources may not help as they claim that a lack of general interest in exploring further sources about autism is a barrier to KS.

It is unlikely that the knowledge strategy within SA, and in particular the element which encourages practitioners to share and reflect, will be successful if staff cannot see the value in increasing their own knowledge by sharing practice. This barrier could be linked to Riege's individual barrier "Low awareness and realisation of the value and benefit of possessed knowledge to others", but it could also be linked to the second organisational barrier: "Lack of leadership and managerial direction in terms of clearly communicating the benefits and values of knowledge sharing practices" and the fourth organisational barrier: "Lack of transparent rewards and recognition systems that would motivate people to share more of their knowledge" (Riege, 2005, p26).

The interviewees also identified another barrier to KS and other KM practices within the organisation which involves the ethical considerations when sharing knowledge about service users. One interviewee was concerned about how to store and share knowledge which may have potential restrictions regarding confidentiality. For example, if details of an instance of good practice were to be shared at a large staff event, consent to use this detail

as a resource for staff training may need to be gained. It would be particularly difficult, in some cases, to establish whether the individual can give properly informed consent or fully understand the question. The interviewee mentions anonymising these examples of good practice, but finds that it is the real life examples which staff and others relate to. The real issue here, the interviewee states, is that it can be difficult to find a way to capture good practice in a way that respects codes of conduct, ethics, and confidentiality in this vocation.

Another barrier much discussed in the interviews was the dichotomy between the drive towards an individualised approach to each service user and their needs, balanced with the aim to replicate good practice across the organisation. The interviewee participants were in favour of sharing knowledge to deepen the base knowledge of autism, which could then be applied to individual situations. For example:

> "No matter how individualised a case would be, autism underpins that. I think there's always room for sharing, sharing knowledge, sharing insights, sharing ideas. Although each person and each service is very individualised there's very much a need to share knowledge. Although people are all very different, there might be some aspects to the services and the strategies which have been put in place, which can then be interpreted in a slightly different way for somebody else. There's always things you can learn from other case studies and so on." – Interviewee One

As mentioned in the literature review, there is much confusion over the definition and implications of the term KS. A further response from another interviewee hints at this need not only for sharing practice, but for subsequent evaluation and application of knowledge in decision-making situations:

> "I think it's essential to share the knowledge, but also that comes with the understanding of what the knowledge is about. So we've got to be able to understand the meaning of somebody else's experience. If something hasn't worked, and it's in the report, we've got to understand not just why it hasn't worked, but what could make it better, or what would make it work the next time." –Interviewee Two

A number of respondents in both the questionnaires and the interviews mentioned that the knowledge of service users and the family of the service user was under-exploited, and that the concept of KS integration within the organisation should extend to include these important sources of knowledge. This barrier was also mentioned in the literature on SSNFPOs (Stauss, 2007).

Interestingly, many of the KSBs unique to the healthcare sector were not found in SA. For example, as mentioned in the literature review, it is suggested that practice knowledge is often not given same weight or reflected upon as there has been a culture of EBP rather than of KS. Additionally Riege's second individual barrier: "Apprehension or fear that sharing may reduce or jeopardise people's job security" (Riege, 2005, p.23) which was also found in the healthcare literature, was not evident in the responses.

The updated list of barriers for this context, presented in the next section, summarises the above findings. As can be seen in the table, there were multiple overlaps between the barriers found in the case study organisation, those in Riege's list, and those found in other

relevant literature. However, there were also some unique or amended barriers, which were not adequately represented in previous research.

Updated barriers list

Potential individual barriers
1. General lack of time to dedicate to KS activities including keeping up-to-date with research and attending KS gatherings (R)
2. Lack of awareness amongst practitioner staff about the value of their knowledge to others (HC; R)
3. Lack of awareness of sources of knowledge, including service users, parents and carers (HC; SC; R)
4. Insufficient capture, evaluation, feedback, communication of knowledge, including success stories or past mistakes and knowledge from published research (R)
5. Lack of experience as a practitioner and differences in education levels (R)
6. Lack of contact time and large geographical distance between staff teams (R)
7. Lack of trust in accuracy and credibility of service user records (R)
8. Lack of confidence to participate in KS activities
9. Lack of motivation to build on personal knowledge base
10. Lack of application of acquired knowledge to decision-making about service provision (HC; SC)
Potential organisational barriers
1. Lack of leadership and managerial direction in terms of clearly communicating the benefits and values of KS practices (R)
2. Lack of formal and informal venues to participate in KS activities (R)
3. Culture which is focused on delivery of services rather than sharing best practice (R; SSNFPO)
4. Lack of investment in workers who have direct knowledge of the needs of service users (R)
5. Lack of resource to support practitioners engaging in KS practices (R)
6. Red-tape when trying to share knowledge with other organisations (TSO; R)
7. Lack of KS beyond teams and across the organisation (R; SSNFPO)
8. Lack of formalisation and dissemination of gathered knowledge
9. Ethical issues around gathering, storing and sharing details of an individual's care (SSNFPO)
10. High staff turnover and loss of time taken to train new staff
11. Lack of mechanism to support knowledge backflow from service users (SC; SSNFPO)
Potential technical barriers
1. IT systems do not cater to staff who want to find out 'who knows what' in the organisation (R)
2. Lack of technological skills to enable effective use of IT (R)
3. IT systems do not adequately support storage and sharing of explicit and tacit knowledge (TSO; R)
4. IT solutions for KM practices are a foreign concept for practitioners

Key:
R = Barrier also represented in some form within Riege's triad of KS barriers
HC = Barrier discussed in review of health care literature
SC = Barrier discussed in social care literature
TSO = Barrier discussed in third sector literature
SSNFPO = Barrier discussed in SSNFPO literature

Conclusions and Further Research

This study examined the extent to which existing literature on KSBs could be applied to a relatively unique organisational context. It aimed to supplement existing knowledge of barriers to sharing by proposing a revised set of barriers to more accurately reflect this context. An analytical framework was developed, based on Riege's triad and extant literature from alternative contexts, and compared with interview and questionnaire responses from staff in a SSNFPO based in Scotland. A revised table of barriers to fit this context has been discussed and developed. As such, the aim of the study has been achieved.

The research has a number of significant implications for both academics and practitioners alike. It was found that although there were similarities in the potential barriers, there were some which either did not completely align with those in the analytical template. As such, it is suggested that KSBs may be sectorially and potentially organisationally contextually dependent, which has implications for successful KM implementation beyond the private and public sector and in similar challenging organisational contexts to this research.

While implementation of KM in SA is an example of the flexibility of the concept, it should be recognised that KSBs found in private and public organisations may not apply in SSNFPOs and other contexts. The implication of this for KM in the third sector, and indeed in other contexts, is that they may encounter barriers to the successful sharing of knowledge which are not adequately explored in academic terms, and for which solutions are not currently offered. For SSNFPOs, this implies that solutions or techniques for overcoming knowledge sharing barriers are required, which cannot be neatly transposed from those used in private or even public sector contexts. This in turn has implications for both the organisation (in this case Scottish Autism) and those affected by Autism. It is hoped that this study goes someway to remedying this lack of investigation into KSBs in this context.

This study found evidence that KM is embedding beyond its original private sector focus, by creating links to other disciplines such as health science. As KM moves into these new contexts, the question arises as to whether existing KM tools, techniques and models are suitable or whether these can and should be adapted. In addition, new taxonomies may need to be developed to reflect the different origins of KM in these contexts and to adequately describe knowledge activities in these contexts. Specifically in relation to existing research into KSBs, it has been shown through this case study that while general lists such as Riege's triad of barriers (2005) are useful, the barriers in specific contexts might not be as exhaustive, but they may be more relevant and may more accurately describe the unique context. The implication of this for KM in the third sector is a real need to carefully adapt existing KM tools and techniques to the organisational context, rather than direct application or implementation.

Additionally, this study has reviewed evidence which suggests that inter-organisational competition and knowledge hoarding may be harmful to the ultimate aim of SSNFPOs. Where organisations can pool resources, share knowledge and learn from each other, there can be greater focus on achieving the social aim of SSNFPOs and benefitting society. Paradoxically however, the competitive context within which SSNFPOs operate in Scotland, where they must compete for funding from local authorities is entirely at odds with this aim, and must be a focus of future research and indeed of sectorial engagement and effort. As mentioned in the literature review, funding bodies are said to be best placed to facilitate sharing between SSNFPOs. However, further research into the benefits of sharing knowledge with other organisations would perhaps help to galvanise the TSOs into working toward their shared goals.

The case study organisation appears to have a culture based approach rather than a technology based approach which became clear in the early stages of data collection. However, with several respondents calling for more formalised recording of knowledge, and others citing the need for more technological solutions, it will be interesting to see how the knowledge strategy within SA, and in other SSNFPOs, will continue to be developed. This finding has potential implications for both future research in this area and KM in this sector. Further research into KM application in TSOs and SSNFPOs, especially into the knowledge

cycle and potential barriers may prove beneficial to the sectors. Testing of the revised list in a variety of contexts (as can be seen in Riege's further work in multinational corporations in 2007) would enable further validation. Taking this a step further and once again in line with Riege's approach, it would also be interesting and potentially useful to TSOs to explore actions to overcome these barriers (Riege, 2007).

Organisations operating within the third sector both in Scotland and indeed globally play a critical role in the wellbeing of society. The proposed list of potential KSBs could (and should) be explored in other TSOs, moving beyond the social care and SSNFPO contexts, and considering the impact of knowledge sharing in other socially significant arenas. As is mentioned, the third sector is hugely diverse and there is scope for study in a wide variety of contexts within this sector. It is hoped that this work has provided a step towards this important goal.

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