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Mixed methods and wellbeing- Issues emerging from multiple studies into mentoring for doctors

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Abstract

In this chapter we explore the development of a body of research work related to mentoring for doctors. The work comprises of four research projects undertaken sequentially over almost two decades using a mix of qualitative and quantitative methods. Research into mentoring has traditionally focused broadly on mentoring schemes, career development and benefits for mentees. In this chapter we describe how through the series of studies and facilitated by the mixture of methods used, we saw unexpected hints and glimpses of wellbeing benefits for mentors emerge and build. This culminated in the final study which explicitly focused on the relationship between engagement in mentoring activities and Drs health and well-being. While charting our research journey within this chapter, we highlight some key issues related to using mixed methods (e.g. funders' requirements; enabling and employing diverse viewpoints, data types and analytical lenses; rigour and reflexivity). We then reflect on the studies and highlight a series of broader issues of importance for researchers wishing to employ mixed methods in the field of wellbeing including the wellbeing of the research participants and the researchers themselves.

Introduction

This chapter outlines our experiences of using mixed methods in ‘real-world’ wellbeing research, through reflecting on a series of issues arising across a number of research studies exploring mentoring for doctors’ wellbeing.

Over the past two decades, Professor Alison Steven (AS) has worked on several mentoring initiatives and studies with Dr Nancy Redfern, a consultant anaesthetist with a lifelong interest in mentoring. This duo became a team when joined by Dr Val Larkin a Senior lecturer in Midwifery and a longstanding interest in mentoring and staff support methods, and Dr Gemma Wilson (GW) a Registered Health Psychologist with expertise and interest in preventative health, and staff wellbeing. Over the years our combined experience indicated that mentoring did indeed seem to have a beneficial impact on doctors’ wellbeing, and unanticipated findings from studies exploring and evaluating mentoring activities linked to wellbeing gradually emerged from each project. As each study was completed, links to wellbeing crystallised further, culminating in the most recent study which responded to these emerging insights by specifically aiming to explore relationships between mentoring activities and doctors’ wellbeing.

The chapter aims to:

- Introduce the context of mentoring in medicine research.
- Surface and discuss a series of methodological, practical, and ethical issues related to ‘doing’ mixed methods research in the field of wellbeing. These are issues for researchers and students to think about when embarking on, and undertaking, such research.
- Illustrate the ways in which the research context, and the mix of employed methods and designs, facilitated the emergence of unanticipated findings related to wellbeing.

Before describing and discussing the studies, we will set the scene by giving a brief introduction to mentoring in medicine and provide methodological context. We will also identify the notions and conceptions of wellbeing employed in the later studies.

Background/context

Mentoring in medicine

The terms ‘mentor’ or ‘mentoring’ are used across many professions and occupations, and have a range of meanings and definitions (Connor & Pokora, 2007; Crisp & Cruz, 2009; Driessen, Overeem, & van der Vleuten, 2011; Johnson, 2002; Polley, Cisternino, & Gray, 2020; Sambunjak, Straus, & Marusic, 2006). The origins of the term ‘mentoring’ lie in the apprenticeship model of work, where an experienced person passed on their knowledge and skills to an inexperienced and usually younger individual.

In medicine, an influential and commonly used definition of mentoring comes from the UK’s 1998 Standing Committee on Postgraduate Medical and Dental Education (Standing Committee on Postgraduate Medical and Dental Education, 1998):

‘The process whereby an experienced, highly regarded, empathic person (the mentor), guides another individual (the mentee) in the development and re-examination of their own ideas, learning, and personal and professional development. The mentor who often, but not necessarily, works in the same organisation or field as the mentee, achieves this by listening and talking in confidence to the mentee’ (SCOPME, 1998, P1)

In health and social care the term ‘mentor’ has also occasionally been used to signify a practitioner who supervises and assesses students in a practice setting (Harrington, 2011).

Although the term mentoring is commonly used, there are actually many conceptualisations or ‘types’ of 'mentoring'. A range of implicit and explicit philosophies underpin the various types of mentoring and influence how mentoring is undertaken. In addition, there are several roles or functions (including career and psychosocial functions) which a mentor may take on depending on the type of mentoring being offered (Kram, 1988). Mentoring types range from the traditional patron/protégé model, through to the mentor as advisor and/or problem solver, educator, or facilitator/empowerer (Connor & Pokora, 2007; Sambunjak et al., 2006).

While mentoring may be useful and beneficial, doctors can be reluctant to seek out and use a mentor due to the stigma often attached to accessing such support. Doctors can misinterpret mentoring as being for the ‘needy’, those who have problems or are underachievers.

Research into mentoring

Much research has been undertaken into mentoring across a wide range of disciplines (Buddeberg-Fischer & Herta, 2006; Geraci & Thigpen, 2017; Liao et al., 2020; Nowell, White, Mrklas, & Norris, 2015; Yoon et al., 2017) and using a variety of methods and methodologies (Frei, Stamm, & Buddeberg-Fischer, 2010; Gong, Van Swol, Hou, & Zhang; Kow et al., 2020; Y. X. Ng et al., 2020). However, in medicine, studies have tended to focus on: mentoring schemes, programmes and initiatives (Buddeberg-Fischer & Herta, 2006; Efstathiou et al., 2018; Frei et al., 2010; Kurré, Bullinger, Petersen-Ewert, & Guse, 2012; Ortega et al., 2018; Sheri et al., 2019); mentoring relationships and processes (K. X. Cheong, 2014; Heeneman & de Grave, 2019; Sng et al., 2017); career development or progression (Efstathiou et al., 2018; Garr & Dewe, 2013; Ong et al., 2018; Pethrick et al., 2017; Stamm & Buddeberg-Fischer, 2011) and the mentoring of students (Buddeberg-Fischer & Herta, 2006; Farkas, Allenbaugh, Bonifacino, Turner, & Corbelli, 2019; Frei et al., 2010; Kalén, Ponzer, Seeberger, Kiessler, & Silén, 2012; M. P. Mann, 1992; Ng, Lynch, Kelly, & Mba, 2020; Skjevik et al., 2020). It seems that much of the research has focused on academic medicine (Cross et al., 2019; Farkas, Bonifacino, Turner, Tilstra, & Corbelli, 2019; Geraci & Thigpen, 2017; Huggett, Borges, Blanco, Wulf, & Hurtubise, 2020; Kashiwagi, Varkey, & Cook, 2013; Sambunjak et al., 2006) with fewer studies related to individual specialties (Lee et al., 2019; Y. X. Ng et al., 2020; Sayan et al., 2019) or indeed covering multiple medical specialties (C. W. S. Cheong et al., 2020; Oxley J., Fleming B., Golding L., Pask H., & A., 2003).

Although some studies in this field exclusively use qualitative methods (Garr & Dewe, 2013; Kalén et al., 2012; Loosveld, Van Gerven, Vanassche, & Driessen, 2020; Sambunjak, Straus, & Marusic, 2010) there are few of them, and in line with the predominant traditional ‘science’ approach in healthcare, quantitative approaches with ‘realist’ orientated ontological underpinnings and positivist/post-positivist epistemological orientations are, instead, commonplace (Cross et al., 2019; Efstathiou et al., 2018; Heeneman & de Grave, 2019; Y. X. Ng et al., 2020; Ortega et al., 2018; Sambunjak et al., 2006; Sheri et al., 2019; Yoon et al., 2017). The significance given to quantitative approaches is illustrated in a much cited 2006 systematic review of mentoring in academic medicine (Sambunjak et al., 2006) - which purposefully excluded qualitative designs. This is typical of a systematic review, or meta-analytic design, however, given this exclusion, it is not possible to know how qualitative studies compared to quantitative studies, and any use of mixed methods designs in the studies included is unclear. Indeed, in this systematic review, survey approaches predominated with 34 (87%) of the 39 studies included using cross-sectional self-report surveys (Sambunjak et al., 2006).

More recent reviews in diverse topic areas of medicine still seem to echo the spread of these research characteristics. For example, a review of mentor training programmes (Sheri et al., 2019), which included all study designs and types, described only 6 (9%) of 68 included articles as mixed methods studies, with a predominance of quantitative, survey-based studies. Another review of the benefits, barriers, and enablers of mentoring female health academics (encompassing both medical and health professions literature) included 27 studies (Cross et al., 2019), of which only 3 were described as mixed methods, and 14 (52%) were deemed 'cross-sectional survey' studies.

Finally, we carried out a systematic narrative review in 2018 which explored links between mentoring and wellbeing (Wilson, Larkin, Redfern, Stewart, & Steven, 2017). Within this review there were far fewer articles, and only 10 empirical studies were relevant for inclusion. Of these, 5 were qualitative studies (involving interviews or focus groups), 3 were quantitative (all using questionnaires) and 3 were mixed methods. By highlighting the presence of qualitative research in this area, the systematic narrative review conducted by our research team highlights the potential bias of past reviews which exclude qualitative research. Other methodological insights from these reviews (Cross et al., 2019; Sheri et al., 2019; Wilson et al., 2017) illustrate that of the studies described as 'mixed methods', some appear to only use multiple surveys (Dutta R et al., 2011; Feldman et al., 2009; Steiner JF, 2004; Welch, Jimenez, Walthall, & Allen, 2012), while others employed surveys and reflective writing (Pfund et al., 2013), surveys and analysis of curriculum vitae (Kirsch et al., 2018) and a mix of questionnaires, with other data collection methods such as focus groups and interviews (Eisen, Sukhani, Brightwell, Stoneham, & Long, 2014; R. Mann, Ball, & Watson, 2011; Steele, Fisman, & Davidson, 2013). This highlights the variability in what is deemed to constitute 'mixed methods', and rather than utilising a mixed methods design, integrating qualitative and quantitative methodologies, many of these studies are using several methods while being led only by a qualitative or quantitative design. Studies using a mixed method design and several methods are advantageous in enabling complex social research questions to be answered from different sources (Greene, 2015).

Mentoring and wellbeing

There is a growing evidence base in medicine and health care which suggests being involved in mentoring programmes and relationships has benefits for both mentees and mentors (Overeem et al., 2010; Oxley J. et al., 2003; Stamm & Buddeberg-Fischer, 2011; A. Steven, 2008; A Steven, Oxley, & Fleming, 2008; Swann, Ramsay, & Bijlani, 2008). Such benefits have been conceptualised by AS, as stretching across the professional and personal worlds that doctors inhabit (A Steven et al., 2008). However, as noted previously, medical and health care research has predominantly been concerned with the benefits of mentoring to student development, career advancement, specialty choices, job satisfaction and performance (Blanco & Qualters, 2020; Buddeberg-Fischer & Herta, 2006; K. X. Cheong, 2014; Cruz-Correa, 2014; Drolet, Sangisetty, Mulvaney, Ryder, & Cioffi, 2014; Frei et al., 2010; Kalen, Ponzer, & Silen, 2012; Kashiwagi et al., 2013; K. Y. B. Ng et al., 2020; Ortega et al., 2018; Prendergast, Heinert, Erickson, Thompson, & Vanden Hoek, 2019).

Little attention has been paid to the impact of mentoring on wellbeing in the research literature, with few studies actually dealing explicitly with this area and many studies focusing on mentoring and wellbeing as only a small part of a wider project (Wilson et al., 2017). The impact of mentoring on wellbeing includes improved employee wellbeing (Department of Health, 2010), working relationships (A Steven et al., 2008), sense of collegiality (Kalen et al., 2012; Overeem et al., 2010; A Steven et al., 2008), and confidence and morale (Drolet et al., 2014; Kalen et al., 2012; A Steven et al., 2008). There also appears to be benefits from being a mentor, with trained mentors reporting that they use skills and frameworks in a variety of clinical and personal situations (Connor & Pokora, 2007; Overeem et al., 2010; A Steven et al., 2008) as well as in mentoring.

This chapter is timely, given the growing appreciation of the importance of staff wellbeing across health care. Furthermore, there is a need for more multifaceted studies which employ mixed methods to enhance our understandings of the impact of support mechanisms such as mentoring on health and wellbeing. In the following sections we will explore some of the studies we have undertaken and highlight some of the issues we have faced – so that other researchers and students may benefit from our insights in future research.

The studies

The chapter draws on a series of studies undertaken between 2002-2018 into mentoring in medicine, later culminating in research specifically on mentoring, and health and wellbeing. All of the studies shared:

- A common view of mentoring as being a set of complex social processes, individual, socially negotiated and context bound which do not lend themselves to purely quantitative (positivistic/post positivistic) research. This is akin to many notions of wellbeing and in line with the conceptualisation of wellbeing held by the study team (Wilson et al., 2017).
- A ‘world view’ in their methodologies which accept complexity and draw on social constructionism and/or critical realism and/or elements of pragmatism.
- Ontologies that assume either no one ‘true’, ‘real’ or fixed manifestation of mentoring that can be accessed, observed, or measured. Or that the reality of mentoring is multi-layered and complex. This leans towards relativistic positioning, although not completely, as later studies kept some elements of critical realism and a hint of pragmatism.
- Epistemological stances were a mix of critical realism and social constructionism, therefore mixed methods were used to give diverse viewpoints from slightly different epistemological positions – to be multifaceted, in order to try to illuminate from diverse positions.

The studies began back in 2002 with the involvement of AS in a national project specifically aiming to explore the benefits of mentoring (Oxley J. et al., 2003), followed by a secondary analysis of data from that same study which began to highlight links to wellbeing (A Steven et al., 2008). This was followed by three further projects: one an evaluation of a mentoring scheme for psychiatrists (A. Steven, 2008); an exploration and evaluation of mentor training and engagement in mentoring activity (Steven A, 2015) and finally research exploring the relationships between mentoring and doctors wellbeing. Table 1 sets out the main details of the studies.

<Table 1: Overview of studies here>

Study number	Year	Aim	Design	Methods, participants & sample type	Theoretical underpinning	Reference
1a	2002-3	Investigate perceived benefits of involvement in mentoring	Qualitative design mixed methods design	Interviews (x1) 49 participants (Range of specialties) Literature review Workshops x2	Interpretivist	Oxley J., Fleming B., Golding L., Pask H., & Steven A. (2003) Improving working lives for doctors. Mentoring for doctors: enhancing the benefit. A working paper. Available at: https://www.academia.edu/1402110/Mentoring_for_doctors_enhancing_the_benefit
1b	2008	Explore overlaps and relationships between areas of benefit.	Qualitative design	Secondary analysis of interviews (Range of specialties) Conceptual model	Interpretivist/ social constructivist	Steven A., Oxley, J. & Fleming, W. G. 2008. Mentoring for NHS doctors: perceived benefits across the personal-professional interface. Journal of the Royal Society of Medicine, 101, 552-557.
2	2008	Develop an understanding of how psychiatrists perceive and evaluate experiences of a mentoring scheme	Explanatory sequential mixed methods design	Questionnaire 22 Interviews 14 Feedback session/workshop x1 (Single medical specialty)	Interpretivist	Steven, A. 2008. Mentoring schemes for psychiatrists in the North East: an evaluation and exploration. Report. University of Newcastle upon Tyne. ISBN 13 978-0-9552799-1-1
3	2015	Explore and evaluate impact of, learning about mentoring and engaging in mentoring activities.	Explanatory sequential mixed methods design	Questionnaire x2 : 22 (x1), 17 (x2) Interviews 11 Evaluation forms 98 (Single medical specialty)	Drew broadly on Realistic Evaluation principles Critical Realism	Steven A. 2015. An evaluation of the implementation and impact of a mentoring programme for Anaesthetists in the North East, Northumbria University Newcastle. ISBN 9781861354655

4	2014-17	Exploring the relationship between engagement in mentoring activities and Drs health and well-being	Convergent mixed methods design	Systematic narrative lit review Questionnaire 57 Interview series (over 2 years), 13 Interviewees (total 43 interviews) (Range of specialties)	Realistic Evaluation principles Critical Realism	Wilson, G., Larkin, V., Redfern, N., Stewart, J. & Steven, A. 2017. Exploring the relationship between mentoring and doctors' health and wellbeing: a narrative review. J R Soc Med, 110, 188-197.
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Accessing diverse viewpoints - building a jigsaw

Adopting a mixed methods approach across these sequential studies allowed the research team to access diverse retrospective and contemporary viewpoints, from a range of professional groups. Indications of links between mentoring and wellbeing began to emerge as the studies progressed, and these formed pieces of a jigsaw which slowly accumulated, making us more and more curious about the relationships between trained mentor activity and wellbeing. This eventually led to our most recent study as we will now explain.

Study 1: Hints of wellbeing

Study 1a (Oxley J. et al., 2003) aimed to investigate perceived benefits of involvement in mentoring. This study combined analysis of interviews, a limited literature review, and two workshops resulted in findings clustered in three broad headings: General benefits to individuals; Help with specific problems; Benefits to organisations. Although the detail of the data and findings hinted at wellbeing, this remained largely implicit and descriptive with wellbeing only mentioned briefly in a supplementary document (Fleming et al., 2003).

'In the experiences of mentoring these doctors reported increased confidence was accompanied by increased feelings of personal wellbeing' (pg 33)

The somewhat condensed, descriptive nature of the analysis and final study report was perhaps a consequence of funders' requirements. The project was funded by the then UK Department of Health as part of the work of a doctors' forum, and as such required production of a 'working paper' with practical, easy to digest, suggestions, and conclusions. Indeed, this is sometimes another thorny issue for researchers who wish to undertake mixed methods research – they need to find sponsorship and funding for such research, but this can also bring certain requirements which may feel constraining. As a result, the desire to explore the findings in a more nuanced, conceptual manner led the research team to undertake a secondary analysis of the data (A Steven et al., 2008) forming study 1b.

While some might question the secondary analysis of data using a set of research aims or questions which differ from those which steered the initial data collection, it can also be argued that it may actually be seen as being ethical to make best use of existing data (Irwin, 2013; Mitchell; Sligo, Nairn, & McGee, 2017). People have given up their time and given of themselves to allow us researchers to collect their 'data' – be they experiences, opinions, or physiological measurements. Thus, doing justice to that data and those participants by 'getting' the most from it, and seeking insights from diverse perspectives, would seem to us to be appropriate and ethically sound. Furthermore, we held the advantage of having already collected much of the data and therefore we had a contextual awareness and authentic understanding of it (Irwin, 2013) that we were able to bring to bear on the secondary analysis.

This analysis began by mapping areas of overlap between the categories of perceived benefits, followed by a more theoretically abstracted exploration – looking beyond the descriptive lists and posing the question 'what is going on here?'. This led to the development of a conceptual model illustrating ways in which the benefits of mentoring seemed to cross the personal-professional interface. With wellbeing emerging more strongly as an aspect of the doctors' lives positively influenced by involvement in mentoring.

'The interlinked categories of professional practice and personal well-being emerged strongly from the secondary analysis and one appeared to enhance the other'(A Steven et al., 2008)(p554)

While the benefits of mentoring were predominantly reported as pertaining to mentees, this secondary analysis also identified subtle indications that mentors may also be benefiting. Thus, the secondary analysis enabled the data to be explored from diverse perspectives using different analytical ‘lenses’ which surfaced links to wellbeing and possible benefits for both mentors and mentees that may not have been captured using only one method of analysis.

Study 2: Further glimpses

As with the first study, the second was commissioned by funders as an evaluation (A. Steven, 2008) with an interest in if a mentoring scheme for consultant psychiatrists ‘worked’ and any improvements that could be made. For this evaluation, we adopted an explanatory sequential design based in interpretivism (Crotty, 1998), with methods moving from quantitative to qualitative to help develop a more in-depth, multifaceted approach. However, the research team remained mindful of the tentative links to wellbeing emerging from the first study and kept this in mind while trying not to let it cloud or skew our approach.

First, a questionnaire comprised mainly of multiple-choice questions and Likert scales, was used to collect a range of demographic and experience data. This data offered a picture of the duration and frequency of mentoring meetings and some sense of the spread of perceptions regarding the usefulness of mentoring. This also acted as a sampling frame, enabling a range of participants and experiences to be identified for participation in semi-structured qualitative interviews (each ~ 1 hour long). The interviews gathered descriptions and perceptions of mentoring experiences. Where appropriate, issues raised by participants were followed up during the interview and incorporated into subsequent interviews- to try to ascertain if these were particular to the individual or shared with others and explore them in more depth. The third stage was a feedback session.

< Figure 1: Study 2 Design here >

Such ‘inductive’ follow up of issues emerging from participants is common in qualitative research and encourages exploration of previously unidentified, or under researched areas (Kvale, 1996; Silverman, 2017) –*such as links between mentoring and wellbeing*. However, care needs to be taken in these circumstances to avoid ‘tunnel vision’ and following only the interests of the researcher (or commissioner)- *making the emerging analysis fit what you want, (even if unconsciously)* (Buetow, 2019). Rigour mechanisms such as reflexivity and using ‘sounding boards’ can be useful in this setting, to regularly help surface and examine the reasons and assumptions behind the decisions being made, and in some respects to help maintain a sense of perspective (Buetow, 2019; Koch, 1998; Ramani, Könings, Mann, & van der Vleuten, 2018). This is where the use of several methods can also help – in enabling diverse viewpoints and data types to be brought to bear on these emerging issues or ideas and offering diverse analytical lenses.

Decisions about which emerging perspectives, ‘issues’, or ideas to follow up in subsequent data collection are in a sense ‘analytical’ and may happen from day one. In this case, the research team or groups made up of researchers, participants and other stakeholders can act as useful ‘sounding boards’- to whom the researcher can present emerging issues, findings and ideas. In such forums, debate and discussion about emerging issues and findings can take place. Depending on the ontological underpinning of the study this may not be a way of ascertaining some ‘truth’, agreement, or consensus, but as a way of unpicking, exploring, challenging, and debating (Buetow, 2019). It may also help see if the emerging ideas, patterns and findings have ‘resonance’ with others and ultimately to decide amongst the team (or with supervisors) if the findings and ideas merit further follow up as the study progresses.

Using this notion of ‘sounding boards’ can be helpful at any stage of the research- helping illuminate researcher blind spots. During the early stages while initial data collection is happening this may remain

within the research team. Later in the study when emerging analysis and findings are more formed, a larger stakeholder forum or ‘workshop’ can be useful for unpicking, discussing, challenging and generally ‘trying out’, adding to and refining the analysis. With these rigour and reflexivity considerations in mind we held research team meetings throughout study 2. We also included a stakeholder ‘feedback session’ as part of the planned methods, and this was held at the point where analysis was well underway, and findings were beginning to form, thus feeding into the final analytical stages (see Figure 1).

Once more, the findings emerging from the study showed glimpses of links and relationships between mentoring activity (learning about mentoring or being mentored) and broader notions of wellbeing. Reflecting on the study - how the mentoring scheme had been experienced and how it had ‘worked’ for those involved - it became clear yet again that mentoring did indeed seem to have an impact on wellbeing as illustrated in the following examples of participant quotes (underlining added for emphasis).

‘During the interviews none of the mentees reported using mentoring sessions to cover issues to do with patients or clinical cases, which concurs with the low positive response in Table 6 (questionnaire results). The majority of comments related to dealing with issues involving; clinical practice and professional relationships, and more personal aspects of life, such as work life balance and career decisions’ (A. Steven, 2008)

‘I think it allowed me to look at work in a wider context of my whole life ... sort of explaining what I wanted from a job, what I wanted from life, thinking about things all much more widely with somebody who was sort of separate and being able to open that up all a lot more” (A. Steven, 2008)

Thus, the thread of evidence suggesting a relationship between mentoring activity and wellbeing impacts seemed to strengthen.

Study 3: A picture appearing

The third study emerged from yet another opportunity to apply for funding to evaluate a range of mentoring initiatives, this time from the viewpoint of UK Anaesthetists (Steven A, 2015). Mindful of our interests, and wishing to enable a broad approach so as not to constrain the study, we were careful to word the aim as *exploring* and evaluating the impact of learning about mentoring (via a training programme) and engaging in a range of mentoring activities (schemes, taster days, networks etc).

This study drew on the principles of Realistic Evaluation (RE) based in Critical Realism (R Pawson, 2013), which suggests that *‘outcomes are explained by the action of particular mechanisms in particular contexts’* (R. Pawson & Tilley, 1997)(p59). RE proposes that by comparing what works, how and why, and under what circumstances, commonalities and variations across contexts (e.g. environmental factors), mechanisms (e.g. individual agency and actions, systems and process), and outcomes (perceptions and experiences of health and wellbeing) can be explored. Thus, it is argued causal powers reside not in objects or individuals, but in the social relations and organisational structures that they form – so giving a more nuanced approach which acknowledges complexity but is underpinned by realist foundations.

This approach is attractive and understandable to those more familiar with realist /positivist type research- such as some traditional science orientated funding bodies. Furthermore, this methodological enables an ‘evaluation’ to be undertaken (so fulfilling funding body aims) whilst also allowing flexibility to explore and follow up any new or unusual emerging insights.

It is important to have a clear logic model or project theory underpinning any study design. This model or theory embodies the reasoning and assumptions which guide the study and should be able to be clearly expressed. For this study, it is as follows:

- The questionnaires acted as a quasi-baseline and follow up – the assumption being that any additional activity related to mentoring reported in the second questionnaire would have been a result of attending the initiative.
- Training programme evaluation sheets offered a snapshot of participants reactions and feelings – the assumption being that these would be ‘fresh’, before they had time to reflect on the programme and reformulate their reactions.
- Interviews offered more space and spontaneity to participants than other forms of data collection- the assumption being that there may be issues, topics, opinions, and experiences that the researcher may not anticipate or ask about. Thus, interviews are less constraining allowing participants to raise issues of importance to them and giving the interviewer the change to follow things up in more depth.
- The mentee evaluation sheets presented a different perspective on mentoring activity – that of the mentees who were ‘recipients’ of the mentoring skills learnt.

This study was again a mixed methods study which echoed an explanatory sequential design (J. Creswell, 2018) incorporating 4 types of data over 5 collection points:

1. A questionnaire distributed at the start of the training programme. Designed to gather opinions regarding attendance, a ‘baseline’ of mentoring activity and initial perceptions of mentoring usefulness. It also served as sampling frame for the subsequent interviews.
2. Evaluation forms completed by those attending the training programme.
3. Semi-structured interviews undertaken 2-4 months after completion of the training programme to collect opinions, experiences and information regarding any activities that had developed.
4. A second questionnaire was distributed approximately 12 months after the first and approximately 6 months after the interviews. It gathered information about activity and impact including opinions regarding skills learnt, attendance at the initiatives: subsequent mentoring activities and opinions regarding usefulness of mentoring.
5. Collection of evaluation sheets from mentees attending taster sessions run by those who had participated in the training programme.

The analysis included descriptive statistics, content and thematic analysis and the framework used in each drew on the aims and objectives of the study and the principles of realistic evaluation (R Pawson, 2013; R. Pawson & Tilley, 1997) to identify salient contextual factors, mechanisms such as barriers and facilitators and outcomes such as perceived benefits, activity and impact.

Once again issues relating to wellbeing emerged both for the mentors and mentees, and also beyond to other colleagues and individuals.

you know, mentoring, ... to help people work through their problems, to enhance, ultimately, I felt well, if I can help people in my work place, you know, it enhances team work, it enhances people's satisfaction, staff satisfaction at work, enhances quality of care... above all else this is something that can be seen as a positive improvement in people's lives (Steven A, 2015)

And by engaging other people [using mentoring skills], and trying to get them to kind of open up as to their motivations behind things actually makes it easier for me because then actually everyone is happier (Steven A, 2015)

Indeed, in the second questionnaire 77% of respondents felt being involved in mentoring had been useful in personal aspects of their life. 84% said it was useful for managing personal dilemmas and

opportunities and nearly all mentees reported finding the mentoring session useful or very useful. This is suggestive of broader reach and impact and indicates the usefulness of diverse methods of data collection. Thus, we became more convinced of the need to follow this up with a specific research study.

Study 4: The finishing pieces

An opportunity then arose to seek funding from the British Medical Association, and we were fortunate to be funded for a 3-year study. This enabled us to undertake a focused mixed methods design using several methods, which incorporated a more longitudinal element and was specifically aimed at exploring the relationship between engagement in mentoring activities by trained mentors and doctors' health and wellbeing (A. Steven et al., 2018)

Therefore once again the methodological approach drew on the principles of RE (R Pawson, 2013; R. Pawson & Tilley, 1997) but also incorporated the Business in the Community (BITC) Workwell model (Business In The Community) (Adshead, 2020) as a heuristic device – offering a broad conceptualisation of wellbeing and acting as a loose analytical framework. The BITC Workwell model (Business In The Community) incorporates physical, psychological and social components of health and wellbeing and suggests that to create a healthy environment, and to support the health and wellbeing of employees, these components need to act together.

Building on the previous studies this project was based on the underlying assumptions:

- That both education (e.g. mentor training and development programmes) and professional support activities (e.g. mentoring activities) are complex social processes which take place in complex settings and are context bound, thus requiring in-depth exploration.
- That mentoring models and skills learned on training courses may be used in a variety of formal and informal activities, not all labelled or badged as 'mentoring' and that these may be related to wellbeing impacts.
- Doctors with more than 2 years' experience as trained mentors may have accumulated a range of mentoring experiences, but their use of skills and models may have become somewhat 'tacit' or embedded (M. Eraut, 2000).
- Doctors who are within 2 years of their 'training' as mentors may have less accumulated experience but may be more aware or conscious of the skills and models, or approaches they use in mentoring (M. Eraut, 2000; M Eraut, 2004).

The study was structured in two linked parts (see diagram 1 below) designed to look retrospectively for indications of any relationships (Wilson et al., 2017), and prospectively to track and understand any emergent relationships as far as possible in 'real time'. This study utilised mixed methods and accessed diverse viewpoints from experienced mentors, as well as those who were new to mentoring. This diversity was an advantage of the research and allowed us to gather data from multiple experiential perspectives, but it also meant that we could not fully integrate the mix of methods due to differences in sampling. The two parts of the study also overlapped slightly and were not completely sequential. Therefore while this study does not fall neatly into any particular mixed methods design description (J. Creswell, 2018), it could be described as a mainly convergent parallel design but with elements of an explanatory sequential approach (J. Creswell, 2018) given tentative initial findings from the survey marginally informed the interviews in the contemporary tracking of 'live cases'.

<Figure 2: BMA study design here>

While analysis of each separate data set can be straightforward, the work that needs to be done alongside this to compare, contrast, extrapolate, abstract and theorise from those sets of findings should not be underestimated. Looking at, and beyond, the separate parts, to make an analytical ‘sense’ of them and then synthesising this as findings takes time and, we would argue, requires multiple perspectives be used.

Therefore in this, and all of the studies, we built in team meetings throughout- both to enhance rigour (as noted previously) but also to facilitate discussion, allow different views on combined data to be presented, explored and discussed, and to enable combined critical and analytical thinking to inform the findings throughout the course of the analysis process.

Whilst conclusions were drawn across both phases of this study, data could not be fully integrated as the sample of participants was different which restricted merging of data. However, the use of the BITC Workwell Model facilitated interpretation across the data sets, through its use as a lens to aid the analysis process and loosely position the data findings. The research team were however very mindful throughout not to constrain or force the data to ‘fit’ the BITC Workwell model, and team meetings helped to maintain an awareness and vigilance of this risk.

Findings were configured as 4 themes with related subcategories:

- Mentorship as a vehicle for better specialist support
- Mentorship supporting better personal and professional relationship building
- Mentorship supporting better professional and personal wellbeing
- Mentorship supporting better working communities and cultures

However, we did not stop at the level of themes but simultaneously interrogated the data sets, themes and subcategories in line with Realistic Evaluation principles. This enabled the mixed methods findings to be expressed as:

- Context, Mechanism and Outcome configurations,
- A conceptual diagram of the linkages and relationships between mentoring activities and wellbeing outcomes (see Figure 3)
- Composite vignettes for each theme illustrating a C,M,O trajectory and relationship between mentoring activity and wellbeing (see Table 2)

<Figure 3 Conceptual diagram of context, mechanism outcome relationships here>

< Table 2 Composite vignette here>

In this study we were specifically interested in the relationships between mentoring and wellbeing and the findings clearly evidenced such links as exemplified by the following quotes.

“was really struggling my way through. And actually some of the [mentoring] sessions I’ve had, some of the time I’ve spent, has been incredibly valuable in terms of psychological wellbeing.” (participant PB 1)

“I’ve created a real safe zone for her. A trusted friend, and a person who is listening and believes in her, because a thing not being believed is a major issue in parts of the... spiral, that got her to where she got.” (participant PF 1)

From the analysis we were able to conclude that mentoring can act as a vehicle for better specialist support, which may:

“emerge as signposting and referral to specialist services, or, when the mentoring relationship becomes in and of itself the targeted specialist support” (A. Steven et al., 2018)p78).

We are currently seeking to publish these findings and move forward with more mixed methods research in this area.

Looking back over the studies

Using mixed methods across this series of studies has undoubtedly assisted in building a clearer picture of the relationships between mentoring activities and wellbeing. For these studies, using a sequence of methods facilitated the emergence of an unanticipated area for research (i.e. relationships between mentoring and wellbeing). The initial studies were undertaken during a period when the notion of wellbeing was not often the focus of research, and although the ‘satisfaction’ or ‘career development’ of mentees was given some emphasis, prior to the inception of our work, the wellbeing of mentors themselves was not considered. If exploratory, open-ended research approaches were not used in the research we carried out with mentors, this would not have allowed us to bring this issue to light. Furthermore the use of several different methods not only enabled us to see more and more emerging glimpses of this relationship, but also offered a multifaceted approach which appealed to many research funders and sponsors and ultimately assisted in securing funding for the most recent study. Indeed, to secure funding for the develop a body of work over several years requires researchers to carefully consider not only the area of investigation, but also the funders requirements and preferences in terms of methods – with a careful balance needing to be struck between the two. However, looking back across the studies there are cross cutting issues which we feel are important in any research around wellbeing– be it mixed methods or otherwise; dealing with assumptions, attending to sensitive issues and anonymity, and the participant-researcher relationship. The following sections cover these 3 topics.

Beware of shared unspoken and spoken assumptions

At the outset of designing any study there are a number of issues taken into consideration, some of these will be consciously discussed (as highlighted in previous sections where the studies are described), while others may remain in the background as shared unspoken assumptions.

One such issue that we have become more conscious of over the years is thinking about participant ‘availability’ and how that may influence the methods used. Through our work in the NHS, and subsequent work as researchers in this environment, it is easy (and we are certain we have done so in the past) to work on the basis of some shared simplistic assumptions regarding groups of research participants. This can impact the data collection methods chosen, having an impact on the research outcomes. For example, choosing to use pen and paper for older participants over digital devices, or in the case of our research, it may be easy to make the assumption that doctors are very important, and are very busy people, which in turn can prompt a sense of not wanting to over burden them. This can lead us to make assumptions on which methods of data collection are most suitable for this sample, such as a less intrusive, less time consuming online questionnaire, and otherwise overlook other more suitable research methods, such as longitudinal interviews.

We may make assumptions about the routinely collected data that we may/may not have access to, or the time in which it would take to access. Again, this can impact the research questions we seek to answer, or the way we look to answer them. This has the potential to stunt the research that we undertake, and the insights that we gain into phenomena, and there is a need to be reflexive in our practice, bringing both our spoken and unspoken assumptions to the fore. Participants, including ‘busy’ professionals, may want to ‘engage’ in research. They may want to be heard, have the opportunity, space, place to engage more deeply and in ways which are less stifling or imposing of certain research areas, topics, or questions (i.e. a questionnaire like much realist research are top down and impose researcher/academic notions of the issue, they constrain answers- even where there are free text boxes these are often limited).

Thus, well-meaning intentions can actually have the result of either ‘cutting out’ and marginalising the group by not affording them higher levels of participation or engagement, not offering alternatives, and constraining data collection and answer types, restricting broader thinking. Or condescending upon them in a patronising manner underpinned by notions of power and self-righteousness (albeit possibly unconscious and with the best of intentions) and of it being in ‘our gift’ as researchers to offer potential participants these opportunities to be involved. In relation to some groups such as older people or those unemployed, it may manifest in a sense of ‘ah that’s nice it will give them an interest and something to do with all that time they have’- something to be guarded against by researchers. However, there are other assumptions that can impact data collection, which come not from the researchers, but from the participants.

In carrying out this research, GW had expertise in psychosocial wellbeing and staff wellbeing, but mentoring was a relatively new area of research. Despite being open about the role as a researcher, and GW not being a mentor, there were various assumptions made during the qualitative data collection during interviews, or upon qualitative data analysis of interviews or open-ended survey questions. Participants assumed expertise in this area of mentoring, and frequently assumed GW was a trained mentor myself. This often led to participants not airing their own thoughts, assumptions, or experiences and instead would say things like ‘you know what I mean’, or ‘well you will know better than me’- implying expertise and shared understanding. For AS these participants’ assumptions led to a different set of issues, as some participants believed me to be a mentor and confused the interview with a mentoring session. Despite perceiving that written and verbal information at the start of each interview regarding qualifications and the nature of the meeting, in several of the interviews participants had to be reminded that we were collecting data and not engaging in mentoring. Thus, similar to the assumptions made by the researcher, those made by participants can impact both on data collection and subsequent analysis.

Therefore, we suggest that researchers brainstorm potential assumptions at the very beginning of research – when ideas are being discussed for a project and when the plan, proposal or design of the study is being drafted. Furthermore, the subject of assumptions needs to be revisited regularly throughout the entire course of the research and here again it is useful to do this in a group where diverse perspectives are present. While it is impossible to surface or recognise all assumptions around a researcher’s perceptions of mentoring, methodological assumptions of using specific mixed methods strategies, or assumptions from participants regarding the study’s aim or the researcher’s role, being reflexive in this way is important for the quality and rigour of the study.

Attending to anonymity and confidentiality

Attention to sensitivities, anonymity and confidentiality (J. W. Creswell & Creswell, 2018; Goodwin, Mays, & Pope, 2019) has been key throughout all the mentoring studies described, and may be particularly pertinent in studies related to wellbeing. While some may assume that confidentiality and anonymity are synonymous and therefore by attending to one (e.g. confidentiality) the other is

automatically taken care on (i.e. anonymity). This is not always the case. While the two concepts are linked, they require separate consideration and sensitive handling throughout a study.

Confidentiality relates mainly to a ‘promise’ given to the participant to not to disclose their identity beyond the research team without permission (Goodwin et al., 2019). Thus, confidentiality is about pledging to maintain privacy or keeping secret certain information – such as personal identification details. A participant may also ask the researcher to keep some information only between the researcher and participant – to be kept ‘secret’, ‘private’ and ‘confidential’. Therefore, confidentiality often comprises a set of rules or procedures for keeping participant information restricted to a small number of the research team members – thus attempting to ensure they are safe/ hidden. Procedures often involve assigning ID numbers, code names or pseudonyms to participants and holding a ‘key’ to the real identification of the participants in a secure list or database. Such ‘keys’ should only be accessible by those in the research team who need this information to carry out the study or hold overall responsibility for the study. This may be the researchers or students? who needs to contact participants to arrange or undertake consent procedures and /or data collection. A study lead, principal investigator or main supervisor may also have access to this information as part of their overall responsibility for the project.

However it is necessary that the ‘promise’ or statement of confidentiality agreed by the participant and researcher at the outset include some form of clause that would let the researcher to break that confidence if the participant reveals something that the researcher feels may indicate imminent harm to the participant or others. This consideration may be particularly pertinent in research related to wellbeing and may necessitate not only a statement to be agreed between researcher and participant, but also a process and procedure to follow should such an occasion occur.

Anonymity relates to keeping the identity of a participant hidden in any research reports, publications, or presentations. Thus the ‘data’ (words from an interview or responses to a questionnaire) can be used by the research team but must not be assigned to or linked to an identifiable participant - they must remain anonymous.

Several of the studies we describe involved specific groups of doctors from particular geographical areas or medical specialties, which can make participants easier for others to identify. Furthermore, while mentoring may be useful and beneficial, doctors can be reluctant to seek out and use a mentor due to the stigma often attached to accessing such support, and mentoring is sometimes misinterpreted as being for the ‘needy’, those who have problems, or underachievers. Thus, some individuals may be reluctant to participate in this type of research through fear of breaking their own anonymity, or that of others if they are a mentor discussing a mentee. Although, this is an assumption made by the research team, and should not impact the choices of methods utilised. This is where mixed methods designs are potentially valuable, allowing data to be collected in multiple ways and increasing the options for participation.

Furthermore, data collection methods may also have implications for anonymity. Mentoring relationships are often focused on sensitive issues, are usually personal, individualised, context bound and somewhat ‘intimate’ in nature. While mentoring can be done in a group (Connor & Pokora, 2007) it is much more common on a one-to-one basis. This means certain types of research and data collection methods may not be suited or easily adapted to mentoring situations and may be felt to impinge on the relationship between mentor and mentee. For example, ethnographic approaches using observation may feel obtrusive. The sense of intrusion may be heightened if a researcher is present at a mentoring session but would perhaps also be felt even if video recording were used. Similarly, focus groups may reduce the sense of anonymity and may go some way to explaining the predominance of survey-based

approaches which are often assumed to be less intrusive and more anonymous. Once again, this suggests assumptions we may make about individuals being more willing to speak more about issues of health and wellbeing through an ‘anonymous’ online survey than via other methods. However, this is not always true. Often open-ended sections of surveys are left empty whereas interviews can often be rich detailed personal discussions. Perhaps having the relationship with the interviewer, seeing a ‘face’, and developing an understanding of who is going to be analysing this data (as well as knowing where it is going) is important to some participants. Indeed, this certainly seemed to be the case in the most recent study where we tracked participants through sequential interviews. This is only brought to light by using several research methods and both qualitative and quantitative designs. Again, the use of mixed methods can be a strength in building this evidence base and allowing data to be collected using several methods, without restricting data collection based on our own assumptions as researchers. This again highlights the importance of surfacing as far as possible the assumptions underpinning a study and trying not to make such assumptions based on an individual’s consideration of anonymity.

Anonymity and confidentiality are often dealt with at the start of a study and while data collecting but is often overlooked in the latter stages– i.e. when writing a final report. However, attending to anonymity in later stages of a project is important, perhaps especially so when related to research with small ‘populations’ such as the doctors in some of our studies. An issue in final reports or publications is the potential for readers to identify participants through ‘tracking’ quotes or other data across the document. To try to mitigate this risk, great care was taken in our study reports (studies 2-4):

To avoid the use of any data (direct quotes or comments etc) that might be especially specific and easily linked to someone in the study population – such as extreme views or other identifying features such as details of personal situation or disabilities etc, and
To change the identifying codes for participants from chapter to chapter. It was hoped that this would make it more difficult for readers to ‘track’ participants and identify them.

For example, in Study 2 we became aware of the potential for participants to be identified because of the opinions or experiences included in the quotes used so we took the following stance regarding ID codes in the final report.

‘The use of ID codes: Given the small population involved in this study different identity codes have been used in each chapter of this report in an attempt to safeguard the anonymity of respondents. Where a code such as ID7 Q15 is used the first part denotes a specific questionnaire respondent and the second part the question number. Interview respondents are identified as mentors or mentees and given a number or letter code.’ (A. Steven, 2008) (pg14)

However, there is a tension here and balance to be struck between giving sufficient information about participants (if important for the interpretation of results/findings e.g. grade of doctor, ethnicity, gender etc.) and, showing sufficient data adequacy and spread (depending on the methodology and underpinning paradigm e.g. illustrating you are not just picking quotes from a small number of participants, or to suit a certain conclusion). With the use of mixed methods designs these challenges should not be underestimated.

The participant- researcher relationship: not so cut and dry

A mixed methods design can bring complexity to the participant-researcher relationship, as using several methods from multiple paradigms increases the likelihood of differing researcher-participant relationships in one study. Typically, within positivist inquiry, elements of objectivity, measurement, replicability, and predictability are the expected outcomes (Eide & Kahn, 2008) whereas contrastingly, qualitative research involves conversation and dialogue, often concerning very personal experiences (Eide & Kahn, 2008). To create the space for such conversations, and to gather meaningful qualitative

research data, it is important to gain a sense of trust and rapport in the researcher-participant relationship and this is often encouraged through the use of qualitative interviewing strategies including prompting, active listening and empathetic cues (Rossetto, 2014). Conversely a one-off online survey does not provide this relationship. The participant remains entirely anonymous, and so do the research team. Whilst eliminating potential boundary blurring, a non-existent relationship between the researcher and participant is not always beneficial. Evidence suggests that using online dissemination strategies may result in lower response rates, partly due to the lack of relationship between researcher and respondents (Sills & Song, 2002). Unless they directly contact the research team, the participant cannot not gather an understanding of who is doing this research and their motivations for doing so, their affiliation with other institutions, including governing bodies, or gain a real sense of anonymity and confidentiality. Of course, it is imperative that all of this is set out in the documentation for participant information and consent, but a lack of relationship and rapport *may* impact the participants' motivations and ease of opening up fully.

However, a more complex participant-researcher relationship is evident in mixed methods research where both qualitative and quantitative work may be involved and interlinked and in our studies, particularly the BMA mentoring research (study 3), we employed two forms of data collection (as described elsewhere in this chapter); online surveys and longitudinal semi-structured interviews. One consideration for the qualitative data collection in this study was the nature of longitudinal interviews, which were carried out at approximately 6-monthly intervals over a 2-year period. This repeated interaction allowed the researcher and participant to get to know each other and establish a relationship of familiarity and trust. Participants were aware that the researchers were bringing with them an interest in mentoring, and thus felt that we understood mentoring, and often assumed we were mentors ourselves. They considered us a confidant, and shared some personal and harrowing experiences related to mentoring. As the research progressed we became increasingly conscious of the potential issues and sensitivities arising from the bonds formed and blurring of boundaries that might occur, and of our ethical obligations as researchers.

There were several other aspects of the research which further compounded this blurring of boundaries from participants perspective. Firstly, participants were mentors, and perhaps considered the research interview as being akin to a mentoring relationship. On the surface, this research interview was set up in a similar manner with a similar environment and similar skills being used across both, however, its aim was very different. Secondly, mentoring is confidential, and as mentors could be open with us about their experiences of mentoring within the interviews, they may also have felt the situation was akin to mentoring relationship. Finally, with relatively few mentors available, individuals do not necessarily have opportunities to discuss their role of mentor with peers. As the research team studying mentoring, the participants knew that we understood their experiences and the difficulties they encountered and perhaps, unconsciously, relied on this relationship more so because of this.

There is an inherently therapeutic element of qualitative research in which the participant contributes to a deeply personal dialogue and sense making (Rossetto, 2014). It is important to have an awareness of, and to attend to, both this 'psychotherapeutic' dimension of qualitative interviews, and associated issues such as role parameters, emotional investment and ending or closing the relationship (Lee-Treweek & Linkogle, 2000). These issues must be recognised, negotiated and re-negotiated throughout the research relationship (Gilbert, 2001; Rossetto, 2014), and are perhaps especially important where long-term contact is combined with sensitive and personal topics - such as those featured in research into mentoring and wellbeing. Such blurring of boundaries not only pose potential ethical issues for participants such as the creation of emotional dependence or a sense of abandonment on conclusion of the relationships, but can also have consequences for the researcher (Andersen & Ivarsson, 2015; Batty, 2020; Dickson-Swift, James, Kippen, & Liamputtong, 2006; Lee-Treweek & Linkogle, 2000).

In the BMA mentoring research (study 3) to try to ensure that professional boundaries remained visible, and the participant recognised clarity between this as a research interview as opposed to being a therapeutic relationship (or mentoring session), at the beginning of each interview we repeated the study aims, reminded participants of the nature of the meeting, and highlighted the number of remaining

interviews. All types of research are to a greater or lesser extent exploitative and reliant on the participants goodwill, but should not cause harm (Andersen & Ivarsson, 2015). We were aware of our ethical obligations and did not want to participants to feel any detriment from the research experience, so these reminders we were designed to give a clear timeframe with an ending and prepare participants for emotional closure to the relationship (Batty, 2020; Lee-Treweek & Linkogle, 2000). In addition we offered information on national mentoring groups in case participants felt they wanted to seek support or mentoring after the research had concluded.

However such intense research relationships can also have issues for the researchers involved including emotional difficulties in leaving research relationships, feeling physically overwhelmed, physical symptoms, and if prolonged can lead to burnout (Batty, 2020; Dickson-Swift et al., 2006). Indeed, qualitative interviewing is not one-way, as the researcher also brings their own emotions and previous experience to the situation. Furthermore if, as may happen in mixed methods research, the researcher also has knowledge regarding the participant gathered through prior data collection (e.g. questionnaires), they come to the interview in a position of greater power. To build the research relationship and engender rapport and openness researchers often give of themselves, offering some personal information and exchanging stories (Batty, 2020). Furthermore over the course of multiple interviews familiarity can grow and bonds develop, resulting in the researcher thinking about the participant and their predicament or experiences long after the study has finished (Batty, 2020; Dickson-Swift et al., 2006; Sikic Micanovic, Stelko, & Sakic, 2019). However there is a fine balance to be struck and maintaining an awareness of boundary blurring is important as researchers can feel emotional anguish when data collection ends or be left with feelings of concern or regret (Batty, 2020). To acknowledge and deal with these issues in study 3, we met frequently with the wider research team (one of whom is an extremely experienced mentor), to discuss in a reflective and supportive manner, not only data collection progress and emerging findings, but also our experiences and feelings regarding the research relationships. We would suggest that attention to both the wellbeing of the participants and the research team is a core ethical obligation for any research and there may be additional complexities when undertaking mixed methods studies which should be carefully considered by the research team at the outset.

Conclusions

Given the increasing understanding of the importance of staff wellbeing across health care, research in Mentoring in Medicine is imperative. However, most research into mentoring in medicine has either concentrated on schemes and processes or focused on mentee benefits and outcomes. Thus, the mentor was overlooked, assumed to act simply as a facilitator, with any benefits or impacts of that role being overlooked. With limited research in this area, multifaceted studies employing mixed methods design are beneficial to enhance our understandings of the impact of mentoring on the health and wellbeing of those involved- including mentors themselves.

In this chapter we have described our use of mixed methods in relation to a body of work around mentoring for doctors which has been undertaken over nearly two decades. The studies were often commissioned predominantly as evaluations of mentoring schemes, not as investigations of wellbeing benefits. However, through the first three consecutive studies and facilitated by mixed methods designs, unanticipated findings relating to mentoring activity and links to mentor's wellbeing slowly emerged and accumulated. These findings were generated via the sequential use of methods which facilitated the emergence of an area that was not often the focus of this particular area of research, and initially, was not the focus of our research. Not only was this beneficial for the research subject, but this multifaceted approach also appealed to research funders and sponsors resulting in successful funding applications, culminating in a study specifically focused on the relationship between mentoring activity and wellbeing.

However, the use of mixed methods, and multiple methods, can be fraught with wider issues. One such issue described in this chapter is the shared and unspoken assumptions which had the potential to change the way data was collected, the relationship between the researcher and participant, and also in the study's focus. Whilst these assumptions are not always conscious, it is important to reflect on these assumptions throughout the research process. Attending to sensitive issues and anonymity was also of great importance, especially in the field of mentoring and wellbeing where highly personal sensitive issues and experiences may be shared with the research team. There is a balance to be struck when using mixed methods between giving sufficient information about participants and showing sufficient data adequacy and spread. Finally, a mixed methods design can bring complexity to the participant-researcher relationship, as using several methods from multiple paradigms increases the likelihood of differing researcher-participant relationships in one study. Whilst quantitative designs may foster a limited relationship between research and participant, qualitative designs can be more therapeutic and intense, especially if data collection occurs at multiple points. Furthermore we feel strongly that if we are researching wellbeing, we should consider it in our own research practice. Thus attending to the participant-researcher relationship is of importance for the wellbeing of both the participant and the researchers involved.

Mixed methods research has been critical to this body of work, resulting in the importance of mentoring and wellbeing emerging from studies with another, more evaluative focus. Whilst the use of a mixed methods design has been critical to our work, it is not without its shortcomings and the use of using several methods from multiple paradigms must be carefully considered within any body of work.

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