

ORCA - Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:https://orca.cardiff.ac.uk/id/eprint/147486/

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Chang, Helen, Desselle, Shane, Canedo, Joanne and Mantzourani, Efi 2022. Reflections of mentors and mentees on a national mentoring programme for pharmacists in the United Kingdom: An examination into organisational culture and systems. Research in Social and Administrative Pharmacy 18 (4), pp. 2659-2669. 10.1016/j.sapharm.2021.05.014

Publishers page: http://dx.doi.org/10.1016/j.sapharm.2021.05.014

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See http://orca.cf.ac.uk/policies.html for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Reflections of mentors and mentees on a national mentoring programme for pharmacists in the United Kingdom: An examination into organisational culture and systems

Abstract

Background: There is no accepted or consistent model for delivering mentoring programmes, manifesting in some debate surrounding the ideal conducive system. Mentorship structures and culture within pharmacy can be advanced by researching experiences of mentors and mentees.

Objective: To explore lived experiences of participants in a nationwide mentoring programme in relation to motivations and barriers associated with engaging with mentoring, and what system changes and organisational culture shift could further support mentoring for pharmacy professionals.

Methods: This study adopted a constructivist research paradigm, with a qualitative design to focus on how participants interpreted the world and their experiences. Verbatim transcripts of recordings were examined using deductive and inductive thematic analysis.

Results: Participants in twenty one-to-one interviews appreciated the programme's allowance for organic relationships to occur, its contribution towards advancing the profession forward, its flexibility, and available resources. They discussed training needs and a more formal onboarding process into the programme that facilitated greater awareness of resources, as well as the need to evaluate and tweak it. System changes were highlighted so that mentoring can be part of the organisational culture, such as incorporating mentoring in job descriptions to increase capacity, senior members of the profession acting as role models, and linking mentoring to existing education and development structures.

Conclusion: Data demonstrated the need for formal structure but that which allowed for informal and organic relationships to develop. It is paramount for sponsoring organisations to provide resources and continuously monitor the program. The rich information gathered on administrative support and structure of a mentoring programme, along with its organisational facets, should help organisations when implementing similar initiatives. An organisation sponsoring or administering a mentoring programme must take actions that help codify its mentoring culture and its advocacy of mentoring as key to advancement for its profession's members.

Keywords: Mentee; Mentoring; Mentoring culture; Mentoring programme; Mentoring system; Pharmacy; Pharmacist

Introduction

The conceptualisation of mentorship has continued to evolve since Kram's seminal work conducted in the 1980s, where she first defined the fundamental processes for mentoring, which has subsequently been used as the basis for many organisational programmes. 1 Mentoring programmes have been shown to be beneficial for mentors, mentees and organisations, promoting learning, facilitating personal development, improving job satisfaction, and improving job performance.^{2,3} However, there does not appear to be an accepted or consistent model for delivering mentoring programmes, manifesting in some debate surrounding the ideal conducive system. There is suggestion that successful mentoring programmes should have intent, structure, process, resources, and be evaluated.4 Formal programmes designed around a set process instil a strong culture of mentorship amongst mentees who subsequently proceed on to mentoring others, and for mentors, a refinement and improvement of their skills.5 Flexible access to resources within an online learning platform additionally contributes to the success of a mentoring programme, including video profiles of mentors which appeared to strengthen connectivity, and the ability to share records of conversations.^{6,7} Furthermore, mentors require training in the form of online learning interactive workshops and networks, to adequately prepare them for the mentoring process, boosting their confidence and motivation.8,9

Chia et al.'s (2020) scoping review highlighted a need to ensure a consistent approach and experience for invested individuals by infusing structure in the delivery of programmes, whilst allowing scope for flexible growth as relationships naturally evolve over time, suggesting that adaptability is essential.¹⁰ Models concentrating on the needs of mentees with minimal institutional oversight, where mentees are able to self-select mentors based on their objectives are preferred over predefined conditions.^{11–14}

It is apparent that systematic mentoring programmes have demonstrated myriad benefits across a plethora of professions and disciplines supporting individuals through periods of personal or career transitions.¹⁵ Nevertheless, the composition of the mentoring infrastructure is not unequivocal. Some point to their presence detracting from or deterring more informal mentoring.¹⁶ Some systematic programmes get started but do not maintain momentum, as there are not enough resources given to their sustainability.¹⁷ Others attempt to actuate a mentoring programme in an organisation where the goals, values, and culture are not particularly aligned very well with the mentoring programme.^{12,18} The mentoring programme might lack accountability and specific goals for its ongoing success.¹⁹

In spite of these potential drawbacks, there is ample evidence to support more systematic programmes. Organisations also have a pivotal role in instilling a mentoring culture amongst individuals, enabling positive connections and subsequent favourable outcomes.^{20–24} Institutions and leaders within institutions, at all levels, must recognise the benefits mentoring can bring to employee's job satisfaction and overall wellbeing, and agree to commit to creating an environment of support and learning, providing mentors with access to appropriate guidance and training for the development and refinement of mentoring skills and experiences.^{25–27} Furthermore, organisations should understand

that mentoring activities require time and acknowledge the commitment of those involved, providing protected time as required.^{26,28}

Disch (2018) discusses a paradigm shift in healthcare mentoring over the last century where it is no longer propagated by generous mentors who offer guidance in the spirit of willingness and collegiality, but instead, is an expectation of the organisational culture, as collaborative interprofessional learning is now prevalent and accepted practice.²⁹ There is some initial evidence to support programmes of mentorship in health professions, including some among professional organisations in pharmacy (for example, American College of Pharmacy).

Within pharmacy there appears to be an inclination towards formal mentoring programmes with specific focus and set intentions. Pharmacists receiving structured mentoring within hospital practice furthered their knowledge and skills, reporting that their ability to undertake their role had improved, which resulted in overall job satisfaction.³⁰ Mentoring programmes have also been utilised to support pharmacists transitioning to new settings of practice (family practice) and develop junior academics within schools of pharmacy to better manage challenges of the role and service responsibilities.^{18,31} Mentoring has the potential to embed health initiatives and enact a change in behaviour in the workplace.³² Programmes can additionally transcend country boundaries bringing together professionals with shared needs across the global to promote shared learning of leadership skills, cultures, and health systems.³³ Furthermore, a recent study suggested that peer mentorship is crucial for supporting the development of advanced level pharmacy practice competencies.³⁴

However, there have not been evaluations of the lived experiences of mentors and mentees participating in such a programme. These experiences are needed to supplement any information obtained on the success or lack thereof in various outcomes assessments of such programmes and delve more deeply into constructs like satisfaction with the programme and description of ideas in which it might be improved, etc. There is a lack of literature of mentorship structures and culture within pharmacy, with the majority of prior research centring on pharmacy student development. The authors have previously interrogated the literature and presented a framework with considerations for mentoring programme design organisations, mentors and mentees when designing mentoring programmes for pharmacy professionals. This paper builds on the programme design dialogue and presents findings of a study that explored perceptions of pharmacy professionals who participated in a national mentoring programme in the United Kingdom (UK).

The Royal Pharmaceutical Society mentoring programme

The Royal Pharmaceutical Society (RPS), the professional body for pharmacy in the UK, relaunched its mentoring programme in 2019, to respond to the growing demand for pharmacy mentors. The relaunched programme was supported by an online mentoring platform that enabled automatic pairing of individuals for a dyadic exchange, based on pre-populated details entered by pharmacists upon registration to the scheme. Phase one constituted the design, creation, and implementation of this mentoring platform whereas future phases would focus on making the programme more sophisticated

and improving the quality, based on a programme evaluation. Table 1 maps key features of the programme as it was rolled out initially, against the frameworks constructed by Desselle et al. and Mantzourani et al. 42,43 The RPS provided a structure but remained removed in stipulating how mentoring relationships should be delivered. It is a voluntary, informally structured programme empowering mentors and mentees to collaboratively explore and agree upon a model that is mutually beneficial. Nevertheless, it is recognised that formal structures can promote the agendas of mentees and mentors, and additionally stimulate spontaneous informal mentoring.⁴⁴

Aim

This is the second study as part of a larger project with the aim of exploring mentors' and mentees' attitudes and perceptions on mentoring and their experiences with the new RPS mentoring programme. In our first paper we focussed on the fundamentals of the unfolding relationships in the dyadic exchange and the impact of the programme on professional development and professional advancement of the participants, its original objective.⁴³ The aim of the study presented in this paper was to explore the motivations and barriers associated with engaging with mentoring, and what system changes and organisational culture shift are needed for further supporting mentoring relationships for pharmacy professionals.

Methods

Methodological approach

A phenomenological approach was adopted,⁴⁵ with a constructivism paradigm⁴⁶ and a qualitative design, allowing the researchers to understand key issues perceived by the participants. It was important to capture participants' true feelings and nuance to their experiences, and the researcher collecting data took care to act non-judgementally and to distance themselves from any prior experiences that may introduce bias.⁴⁷ Data were collected with semi-structured interviews, using a pre-piloted semi-structured interview topic guide developed by a combination of literature review and stakeholder input (Supplementary Table 1). Particularly useful was a concept referred to as "the vertical axis of mentoring", which considers multiple mentoring theories and which acknowledges that mentoring outcomes and relationships are influenced by the individuals, the dyads that are formed by those individuals, the structural programme or organisation administering the programme, and even societal influences.⁴⁸ A subject matter expert checked for validation of the interview questions. Ethical approval for the study and documentation was provided by a University Research and Ethics Committee in November 2019.

Sample and sample size

A mixture of purposive non-probability sampling and convenience sampling was used. All mentors and mentees registered in the RPS's mentoring programme, with an active relationship as identified by the online platform, were eligible to participate in the study; all those who responded to the invitation email within our data collection period were selected for an interview. A reflexive approach

was adopted towards the sample size, by using the concept of information power and considering the specific aims of the study, as suggested by Malterud et al,.⁴⁹ and also data saturation⁵⁰. We anticipated the need for interviews with approximately 5-6 participants from each group (mentors and mentees.

Recruitment

The education administrator and RPS marketing team acted as a gatekeeper to identify potential participants and send a recruitment email with background information, information sheet and consent form. The gatekeeper had access to a list of all the pharmacists who had been matched with a mentor/mentee, all of whom had agreed when joining that they could be contacted for feedback on the RPS's services, including mentoring. The gatekeeper was used only as a means of forwarding information to the potential participants and not, in any way, decide whether participation would occur, on the participant's behalf. Recruitment emails were sent using a stratified approach, with pharmacy professionals receiving an invitation within 4 weeks of having been matched with a mentor or mentee by the platform and showing as having had at least 2 meetings. No attempts were made to recruit dyads of mentors-mentees, Additional detail on recruitment and other methods have been provided elsewhere.⁵¹

Data analysis

Recordings were transcribed verbatim, checked for accuracy by a different researcher and anonymised. Transcribed data were assigned inductive codes, based on which deductive analysis followed.⁵² Data was coded manually by two researchers, and any differences in the independently assigned coding were discussed and resolved.

Researcher characteristics and techniques to enhance trustworthiness

To meet the criteria for trustworthiness as described by Lincoln & Guba (1985), and in an effort to increase rigour, transparency and replicability, a number of measures were followed, and the structure of the report was based on the Standards for Reporting Qualitative Research (Supplementary Table 2).^{53,54} The researcher collecting data (EM) was not involved in the coding, as they are a pharmacist who had previously mentored other pharmacy professionals outside of the RPS mentoring scheme and they may have introduced bias in the analysis. One of the researchers coding the data was an employee of the RPS (HC), and as such, was not involved in data collection. The coding was repeated independently by a second researcher (JC).

Results

A total of 20 one-to-one interviews were conducted, lasting between 20-55 minutes. The sample comprised of 13 mentors (P1-P6, P10-P14, P17-P19), four mentees (P8, P15, P16, P20) and three professionals who were participating in the mentoring programme both as a mentor and a mentee (P6, P7, P9); this was above the anticipated recruitment target for mentors and mentees, and indeed, no new concepts were discussed after the first 6 interviews for each group. A range of roles were

detailed including community pharmacy, hospital practice, general practice, and the pharmaceutical industry.

A total of four themes were constructed during data analysis; in this paper the two themes relating to attitudes towards mentoring and shifting culture to increase engagement with mentoring, and mechanisms and structures that facilitate mentoring are presented and discussed (Figure 1). The other two themes relating to principles of engaging in mentoring and developing a connection, and perceived contribution of mentoring towards self-growth and supporting career progression, have been presented in previous work.⁵⁵

All male (M) and female (F) participants in this study had experienced mentoring as a mentee or mentor, either informally or as part of a formal programme, which impacted on their willingness to engage with the scheme (subtheme 1.1), and discussed different factors that impacted their capacity for mentoring (1.2) whilst reflecting on the usefulness and need for a formal recognition process (1.3). A range of support mechanisms were discussed by participants that could contribute towards improvement and sustainability of the scheme. Mixed perceptions were identified in relation to usefulness and need for training resources before entering a formal mentoring relationship via the RPS's programme (2.1). Technology was discussed, specifically features of the digital platform that were perceived as helpful in the mentoring experience, and also features for functionality and information capture that could be improved (2.2). Both mentors and mentees also talked about structures that would enable them to share experiences and receive support, outside of their immediate mentoring relationships (2.3). Table 2 presents some quotes from participants, in addition to the ones included in the themes below.

1. Attitudes towards mentoring and shifting culture to increase engagement

1.1 Prior experience of mentoring and impact on willingness to engage

Informal mentoring was associated with pre-registration training, tutoring, management, often in a pastoral capacity, but also simply supporting others. Many participants had acted as pre-registration training tutors or clinical diploma tutors as part of their employed roles, supporting individuals through structured training programmes. Mentees also associated tutoring as a form of informal mentoring, and many had direct experience of this in their early years of practice. Participants discussed examples of situations where they supported junior colleagues in their workplace, which often presented organically from everyday situations.

"[My] role was a pastoral support. So we weren't necessarily, well we weren't their [tutor] but we were just there as a kind of buddy system. So I would be mentoring in that kind of pastoral capacity to make sure they're adapting to pre-reg life." (P5, F, mentor)

Formal mentoring was described as structured programmes provided by organisations or training providers. Examples provided were academic employability programmes, academic research mentoring, leadership development programmes, charity projects, and organisation-based coaching

schemes. Individuals were usually assigned mentors without usually having a choice, which seemed to affect some relationships. One participant revealed that being mentored by a non-pharmacist who did not fully understand the profession, at times, was challenging and unhelpful.

Some mentors discussed that they continue to act as a mentor in settings other than the RPS's official mentoring scheme, as they consider it part of their continuing contribution to supporting others.

"I'm actually still mentoring her [mentee]. Been mentoring her for a very long time because she's been through so many different organisational changes. And she still finds the mentoring useful, so I've continued to mentor her." (P11, F, mentor)

This prior mentoring experience was reported to influence their decision to participate in mentoring programmes, as they had already observed positive change and benefits, which motivated them to volunteer as mentors and in turn support others. One participant highlighted the pivotal influence of early experiences, as a bad experience could deter individuals from partaking in further mentoring initiatives.

"I guess there are some people who've had bad experiences as a pre-regs or at university or earlier in their career. Where they've had people who are supporting or mentoring them or whatever word, whatever contact it is. Umm, which they didn't find very helpful and therefore that's why they're a bit nervous about trying it again" (P12, M, mentor)

It was discussed how mentoring programmes should have integral mechanisms to monitor experiences and offer exit routes and support, should a relationship turn out to not meet the expectations of either mentoring partner. This was perceived as key for sustainability and growth of mentoring programmes.

1.2 Factors that impact the individual's capacity for investing in a mentoring journey

Mentoring being part of the organisational culture and accepted as part of the individual's role was the single factor that was seen as a facilitator, with most participants who worked in academia or hospital pharmacy receiving support and time allowance to act as a mentor. This, in turn, created capacity and increased their motivation to engage in a mentoring relationship. Similar views were shared by the participant with a role in industry, who discussed that, even though challenging, flexibility in their working pattern instigated by their employer, enabled them to balance their workload and dedicate time to mentoring.

"I'm actually in academia so in academia it is recognized that mentorship is work so if I tell my, my supervisor you know like I'm, I have a mentor or I'm supervising somebody. He doesn't tell me things like 'you have to do that on your own time'...." (P19, F, mentor)

In contrast, participants with experience in community pharmacy as part of their current or previous role, shared that there was no capacity at all to integrate mentoring in working hours, and no organisational expectation or encouragement for this activity as means of professional development. The highly intense working environment also meant that the only realistic option should they wished to

mentor others or seek a mentor themselves would be after work, balancing this with limited personal time and energy levels. This was significantly impacted by the current pandemic situation.

It was recognised that the concepts or organisational leadership towards mentoring culture is crucial to maximise engagement, and several possible suggestions were made towards this long-term goal. Participants highlighted that employers need to be made aware of the benefits of mentoring and be encouraged to incorporate mentoring into job descriptions. It was additionally felt that leaders within the profession and those who have had positive experiences should champion mentoring by sharing their own stories and be role models. Organisations who provide mentoring schemes could also increase awareness through wide ranging promotion in pharmacy publications, social media, and direct newsletters, and there were suggestions from participants to link mentoring to existing education and development structures.

"Maybe there's some work there to do with the leaders who are out there [to be mentors]. Are they members [of the mentoring scheme]? And if not, why not? And how can you encourage them because then they would encourage the staff down the chain." (P14, F, mentor)

A factor that was perceived by many participants to negatively access to mentoring opportunities was that the scheme was delivered through a high cost membership organisation, and those who have chosen not to be members are unable to benefit from the expertise and experiences of mentors within the profession. This was highlighted as a barrier to becoming involved in mentoring but also as a block for instilling a mentoring culture within pharmacy; those not part of the membership would be unaware of what is on offer.

1.3 Feeling valued: attitudes towards recognition linked to formal rewards process

Another concept that was discussed was the potential use of a range of formal rewards process in relation to recognition of mentors, as a means of increasing engagement to the scheme. Different examples included postnominals from the professional body, formal certificates for participants' CVs and revalidation records, a recognition process where mentees could nominate mentors for a designated title or an award.

"I think you need to give something back to mentors because they're giving up their time umm...to run with this, so what do they gain out of this? So there needs to be some sort of uh...tangible umm...reward whether it's a small reward or something because they are giving up their time and these people are very busy." (P20, M, mentee)

These ways of providing a formal recognition to mentors were not perceived as necessary or even useful by all participants. Many felt that a simple 'thank you' in the form of a letter from the RPS would be sufficient to recognise their contributions and time. Some concerns were raised that individuals may volunteer to be mentors for the wrong reasons or volunteer even though they might not possess the required skills or attributes, which could have detrimental impact on the mentees' experiences.

2. Mechanisms and structures that facilitate mentoring

2.1 Perceptions of usefulness and need for structured training and resources

In general mentees engaged more with the training resources provided on the RPS's website before entering a formal mentoring relationship, whilst mentors accessed and used the resources at varying degrees. A small number of very experienced mentors admitted that they felt confident in their understanding of, and approach towards, mentoring. In conjunction with increased time pressures, it meant they did not use the resources at all. Most mentors used the resources as prompts to refamiliarise themselves with the theories of mentoring, reflect on their approach, understand the expectations of the scheme, and learn whether there were requirements for the structure of meetings and frequency of communication.

"I did [access the resources] cos I just felt like I wanted that kind of reassurance in my decision to, that I was okay to be a mentor" (P5, F, mentor)

There were differing views of the most appropriate format and topics for guidance, indicating divergent training needs, which appeared to be linked to experience. As individuals may be joining the mentoring programme with different levels of experience of mentoring, it would be difficult to develop and provide training that would meet everyone's needs. Participants also discussed providing options for using external resources produced by other organisations for training, as mentoring concepts are broad, and it would not be possible to provide resources about all situations that individuals may experience during their mentoring relationship.

"I think it's really difficult [to know what training would be useful] because people come from such different starting points." (P11, F, mentor)

Participants also discussed that none of the existing materials provided the opportunity for discussion and questions, and recommended online training via webinars as an additional option. In relation to method of delivery, additional options were recommended such as short videos, as more engaging than written resources, and face-to-face training that would provide both mentors and mentees with the opportunity to practise scenarios as role plays. Some individuals had received such face-to-face training previously from the RPS and highlighted that it allowed for the sharing of experiences within a group environment and learning from each other.

"I think opportunities for Q&As might be useful via webinar umm... where people could potentially have a background, sort of presentation, and then opportunities to ask if they've got any insecurities in terms of starting a relationship" (P9, F, mentor/mentee)

One area where participants expressed quite polarised views was in relation to whether engagement with resources should be a pre-requisite for a mentor before they get accepted in a programme, and whether a level of competency should be displayed. It was recognised that quality could be improved within the existing RPS programme, to ensure that those engaged in mentoring receive a fulfilling experience. Suggestions were made for a screening process before a mentor can register to the mentoring programme, to assure quality. However, it was discussed that mentoring was a voluntary activity and having any screening process or requirement to prove competency could be considered

by potential mentors as condescending, and therefore could potentially deter suitable individuals from engaging with the scheme.

"I think for mentors... you should have, like [sic], a questionnaire or you should have a telephone call with questions as to 'why you want to become a mentor, what do you have to offer as a mentor, what will you do as a mentor, what are the challenges of mentoring'." (P3, F, mentor)

2.2 Support via digital infrastructure and perceived limitations

It was recognised that technology, such as the digital matching platform available via the mentoring programme, could facilitate aspects of mentoring but also hinder connections between mentors and mentee when specific features were not well designed. Participants highlighted that a simple and intuitive platform could be helpful for mentoring, notably functionality that enables users to connect and to communicate by email or direct messaging. A platform appeared to have had a minimal impact on the actual relationship that is established but it was perceived as an enabling tool for individuals to meet others, of particular benefit for pharmacists who are new to the profession, in isolated roles or geographies, and those who have no or small networks. Mentees described how the platform introduced them to colleagues they would have never met in their practice whilst mentors acknowledged that the detailed experience and interests, they were able to input when they signed up to the scheme attracted candidates who were a good match.

"I think it's [platform] really good. I think it's helping other people to connect. I think it's, it's really good in the sense that um...the three, the three new people who have contacted perhaps wouldn't have contacted me if it hadn't been for the mentoring website." (P6)

Participants gave suggestions for improvements to the current structure that would improve efficiency but also for increased functionality to the RPS platform, to maximise information captured for continuing development of the mentoring experience.

One specific enhancement that could improve a user's experience was made by several participants, specifically the functionality to send notifications within the platform. It was felt that the process for requesting mentors was a little cumbersome, slow, and it was discussed that it was not clear when a response was likely to be received, therefore a method for resending mentoring requests would be useful.

"...it could be something around a notification going back to the mentee that 'you haven't engaged with your mentor for x amount of months, do you want to carry on? Yes or no?' ... because they could then, they have that option of yes and 'oh that's reminded me, I need to connect with my mentor' and then they can connect." (P6, M, mentor/mentee)

Some participants mentioned that poor navigation, but also multiple login steps made checking messages from their mentoring partner difficult, and they would like to see this process simplified. Many felt that it was easier to use email to communicate instead of messaging within the platform, as

this avoided the need to sign into the system, implying that the messaging functionality is perhaps only helpful for introductions, but thereafter this becomes a redundant feature.

"It's a little bit clunky I think to find your way around initially [on the platform]. . . Once you do it a few times you can find your away around, it's sort of a struggle to get to where I want to be." (P18, F, mentor)

Some mentee participants felt that there was not sufficient information about mentors within the platform and would have liked to have access to further information about mentors' roles and responsibilities in their daily jobs. Mentors also agreed, highlighting that it would be useful to have access to a profile of mentees' career history and their experience, so they could make a judgement on whether they have the appropriate experience to support, but more importantly, if they would be a 'good fit' as a mentor, before they agreed to support them.

"One thing ... would be helpful is to understand, and not necessarily their [the mentor's] CV, but certainly their... job roles a little bit more. So I think that's a little bit unclear, because it was quite important what [the mentor is] doing and also... in their own words, what they, why they are doing it, or what they want...what they want to offer or what, what they are able to offer [as a mentor]." (P7, M, mentor/mentee)

There was also a preference from a number of mentors for face-to-face interactions with mentees, as they believed that this is crucial for a collaborative relationship; they perceived that distance, whether real because of location, or imposed because of the pandemic restrictions, hindered such relationship. One participant went as far as to admit an awkwardness associated with online communications.

Perhaps the most important enhancement to the platform, as outlined by participants, would be the ability to formally capture meaningful feedback to inform the development of individuals but also of the scheme. However, it was highlighted that for feedback mechanisms to contribute to professional and personal development, they should be meaningful, measuring quality and effectiveness through the capture of qualitative data and not be a mere tick box exercise. Follow-up calls with mentees and mentors was one perceived meaningful mechanism. It was thought this would allow organisations delivering mentoring schemes to understand how individuals perceived the suitability of the partnering match, how the relationship was working, and to understand any potential challenges that require intervention. It was considered that it would also serve as a prompt for those who are less motivated to step away from the scheme, if it was not meeting their expectations.

"We need to somehow to find a mechanism for measuring effectiveness...you can't just be ...quantitative or tick box. It must be qualitative, of how are people benefitting." (P17, M, mentor)

2.3 Supporting further development of individuals outside of a mentoring relationship
Participants articulated that a structure that would enable them to share experiences and receive support, outside of their immediate mentoring relationships, would be of great value. This was

discussed by mentors, as a way to receive support in potential challenging situations, share best practice and explore ideas together. Knowing that there is someone else they could reach out to for assistance would instil confidence particularly in less experienced mentors.

"I would love [emphasis] to learn from another mentor. I would love [emphasis] to learn how they go about it. Um, I would love to share how I do things but also, I would love to sit in a table and say right this is how I do it ... you know? This is what works and this is what I've noted and you know this is why I do it this way or maybe we should use this technique and I think that's great." (P3, F, mentor)

Mentees also perceived that sharing of experiences and knowledge, and providing support to each other and to other pharmacy professionals who are thinking about embarking on a mentoring relationship but are anxious about the logistics, would be vital to their ongoing development and that of their peers. They also highlighted that via this structure they would be able to meet other colleagues through a forum or network.

To achieve this support, communities of practice were discussed, with a combination of face-to-face and online networking options and access to forums. Online networks and forum were considered as being more accessible and provided the additional ability for timely linking to a colleague, should the need arise. Meetings at conferences were discussed as an efficient way of ad hoc networking while more structured sessions or events, for example themed discussion webinars, were also suggested.

Discussion

This study examined the lived experiences of participants in a nationwide mentoring programme, focusing on structural, logistical, resource, and administrative support issues. Participants were mostly positive about the programme and its support on the whole, while offering some recommendations to make it even more utile and user-friendly. The findings comported with the aforementioned vertical axis of mentoring, indicative of multiple influences on mentoring outcomes, including the organisation (RPS, in this case) exerting influence through its structure, flexibility, and available resources.

Prior experience is not a requisite for participation in the RPS mentoring programme, nevertheless it appears that positive experiences influence an individual's willingness to engage, a factor that is understood to be important in building a successful mentoring relationship. Study participants displayed a breadth of formal and informal experience, with emphasis on pastoral support; that is, going beyond the technical and receiving coaching on matters even outside career and extensions of camaraderie and friendship during participation, even with a good portion of the programme interactions being online. Shanks et al. (2020) found evidence to support better outcomes among teacher mentor-mentee dyads when pastoral support was offered in addition to career guidance.⁵⁶ This gets at the concept of 'whole-life mentoring', which has its proponents rooted in evidence of its effectiveness not only in satisfaction with the programme, but the programmes sustainability and in mentee's sense of belonging to the career and to the organisation.⁵⁷ A mechanism of capturing and

highlight experiences of mentors may potentially be a useful selection criteria for the matching process, and worthy of inclusion within platforms used by organisations for mentoring programmes.

Participants acknowledged the influence of organisations and employers in forging a culture that instils mentoring, suggesting an imperative to involve key stakeholders in creating programmes that allows individuals to freely engage and reap rewards associated with professional development. Reviews and other available evidence suggest a need to imbed mentoring as part of the organisation's (society's) culture. Sheridan et al. (2015) indicated a need for a programme to embody the goals of the organisation, but additionally, that the organisation must view mentoring as it does other critical development functions as dynamic, always ready to innovate based upon internal and external environmental scans.⁵⁸ Bryant et al. (2015) added that mentoring programme participants, even while enjoying personal reward and benefit from maintaining presence in the programme, do not fully buy in or might be reticent to fully engage without knowing of the sponsoring organisation's full commitment to mentoring.⁵⁹

Participant interviewees expressed appreciation for the existence of a national mentoring programme and an online platform. They believed that participating in such programmes allows them, particularly the mentors, a way of giving back to the profession. This comports with the findings in a recent systematic review of mentoring in health professions, where mentors reported in a 'professional awakening', improved career vitality, and a sense of generosity for having donated their time to a worthy cause as having advanced their disciplines and its constituent patients and clients.⁵⁸ That same review reported that mentees reported having accomplished substantial improvements in development, career planning, and optimism for the future, which were also benefits highlighted by participants and important to share with those who may question the value of mentoring. Interviewees expressed a desire for their mentoring activities to be more clearly acknowledged by RPS. Indeed, Lin et al. (2015) discuss the provision of professional and financial incentives not unlike those mentioned by interviewees (e.g., mentor awards, annual recognition) to acknowledge support and appreciation.⁶¹ This would represent an additional step forward with inculcating mentorship into the fabric, organisational culture, and values expressed by the Society.

There was a positive culture toward mentorship, nevertheless programme participants believed that RPS could make some improvements that would even better signal its support. Participants commented on the wealth of resources and information provided by RPS on its website. However, they also indicated that the Society could provide more of an entree or orientation to the resources available and might consider more of a more formal onboarding into the mentorship process. Greene and Puetzer (2002) were faced with similar circumstances and found positive results from a more structured beginning and training component to their mentoring programme. Doing so would not appear to obviate the desired informal and organic aspects of the RPS programme. Nick et al. (2012) also identified several keys to successful mentoring programmes, including the establishment of clear mentorship purpose and goals, and promoting the dyadic relationship. Administrative support was also identified as a key component in a systematic review of programmes in the nursing profession.

programme and assessing whether it is meeting those goals, and sponsoring workshops for programme participants. The RPS does provide such support as described in table 1 but it appears that this may not be evident, therefore sharing information about available support could be prioritises as an area for focus.

In spite of it allowing for, even facilitating informal mentoring and organic natures of dyadic relationships, RPS is perceived to provide an effective level of support. This support is connoted through the availability of programming, the presence of an electronic platform, available resources, and encouragement from the Society. However, interviewees expressed some frustration with the platform through which the programme is administered. Klinge (2015) discussed the need to evaluate systems and technology used in mentoring programmes, be it for expressing interest, logging mentoring activities, accessing resources, and other. ⁶⁵ This is especially the case for e-mentoring programmes such as that which concerns a nationwide initiative and others moving forward with changes perhaps in all mentoring programmes as a result of the COVID-19 pandemic. ⁶⁶ Evaluating technology is one component of the need for broader evaluation of mentoring programmes, in general. Mentoring programmes often flail, or at best remain static and only moderately engaging when they are not assessed and monitored. ⁶⁷ Thus, organisations who provide access to mentoring must review systems, and seek feedback from users to ensure that the structures in place continue to meet needs and are improved where necessary to provide a quality experience.

There was a clear desire from study participants to share learnings and seek support from peers through communities of practice outside of a mentoring relationship. Programmes like RPS and others, at the very least need to advocate for social exchange and encourage intimacy in relationships, though obviously not attempting to enforce such a proviso. Yip and Kram discussed developmental networks that include formal mentors, in addition to supervisors, and even family members, and personal counsel.⁶⁸ This might be a bold and unwieldy undertaking for a national programme, but might be something to consider moving forward as RPS seeks to position its programme as one seeking maximum benefit and maintain a process that might be considered ahead of the curve.⁶⁸

Study Strengths and Limitations

This study is the second in a series that examined, for the first time, the lived experiences of participants in a nationwide programme of pharmacists administered by the RPS. It evaluated specifically administrative support and structure, along with organisational facets of the programme – both pivotal for any successful mentoring initiative. The study employed the use of saturation and information power theories to inform the sampling and execution of the project as well as multiple coders and other measures undertaken to ensure trustworthiness in the data generated. ⁶⁹ The anticipated recruitment of approximately 5-6 mentors and mentees each was achieved, with the final sample comprising of 13 mentors, four and three pharmacists who were participating in the mentoring programme both as a mentor and a mentee.

There are several limitations to consider when interpreting the results of this study. The findings are from a purposively selected sample intended to provide rich information but not to be extrapolated.

While the interview schedule was semi-structured, the researchers cannot preclude the possibility of different sets of answers, depth of those answers, and their interpretation if different researchers were involved in conducting and coding the interviews. Whilst efforts have been made to reduce bias through ensuring that the researcher collecting data and analysing data are not the same, there is still bias due to their position; further, the participants were aware that RPS was involved in the evaluation. Both these factors may have impacted recruitment and introduced recruitment bias.

Conclusion

Results from this study signify the system changes and shift to organisational culture necessary to increase engagement with mentoring and ensure mentors and mentees feel supported to embarking in their mentoring journey with confidence. The rich information gathered on administrative support and structure of a mentoring programme, along with its organisational facets, can be used by key stakeholders in different organisations and settings when considering initiating or refining existing mentoring programmes.

The success of mentoring programmes appears to be influenced by multilevel factors associated with the society, the organisation, and individuals. Within the UK, the pharmacy profession is yet to fully embrace mentoring. The provision of appropriate mechanisms for individuals to participate in mentoring will further contribute to a learning culture within pharmacy. Benefits of mentoring and personal journeys of development should be widely shared to raise awareness. Programmes should be flexible but encourage a structured agreement of initial goals and expectations so both parties commit. Organisations delivering programmes should ensure that mentors have access to training and ongoing support for their development including communities of practice to allow for the sharing of experiences and peer-to-peer discussions. Furthermore, mentors should be recognised for their investment in supporting others; this need not be a formal award but acknowledgement by way of a letter or accepted title. Doing so would help codify the organisation's culture and its advocacy of mentoring as key to advancement for its profession's members.

Declaration of competing interests

None

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Acknowledgements

The authors would like to acknowledge the contribution of Ashley Torres, PharmD Candidate at Touro University California for the transcribing of interviews, and the staff of the RPS who aided in the

recruitment of study participants. We would also like to thank Gail Fleming, Director of Education and Professional Development, Royal Pharmaceutical Society, for providing strategic leadership and support for the development of the RPS mentoring programme.

References

- Kram KE. Phases of the mentor relationship. *Acad Manag J.* 1983;26(4):608-625. doi:10.2307/255910
- 2. Cooke KJ, Patt DA, Prabhu RS. The road of mentorship. *Am Soc Clin Oncol Educ B*. 2017;37:788-792. doi:10.14694/edbk 175193
- 3. Małota W. Why managers want to be mentors? The role of intrinsic and extrinsic motivation and the anticipated costs of mentoring for the propensity to mentor by managers in formal mentoring in organizations. *J Manag Bus Adm Cent Eur.* 2019;27(2):64-82. doi:10.7206/jmba.ce.2450-7814.253
- 4. Law A V, Bottenberg MM, Brozick AH, et al. A checklist for the development of faculty mentorship programs. *Am J Pharm Educ.* 2014;78(5):98. doi:10.5688/ajpe78598
- 5. Efstathiou JA, Drumm MR, Paly JP, et al. Long-term impact of a faculty mentoring program in academic medicine. *PLoS One*. 2018;13(11):e0207634. doi:10.1371/journal.pone.0207634
- 6. Polley C, Cisternino A, Gray A. A novel approach to medical mentoring. *Clin Teach*. 2021;18(1):37-42. doi:10.1111/tct.13143
- 7. Phillips G, Lee D, Shailin S, O'Reilly G, Cameron P. The Pacific emergency medicine mentoring program: A model for medical mentoring in the Pacific region. *Emerg Med Australas*. 2019;31(6):1092-1100. doi:10.1111/1742-6723.13366
- 8. Fowler JL, Mcconachie B, Hattingh L, Wheeler AJ. Mentoring pharmacy staff to implement a medication support service: An evaluation of process and outcomes. *Curr Pharm Teach Learn*. 2018;10:886-894. doi:10.1016/j.cptl.2018.04.004
- 9. Sheri K, Ying J, Too J, et al. A scoping review of mentor training programs in medicine between 1990 and 2017. *Med Educ Online*. 2018;24:1555435. doi:10.1080/10872981.2018.1555435
- Chia EWY, Tay KT, Xiao S, et al. The pivotal role of host organizations in enhancing mentoring in internal medicine: A scoping review. *J Med Educ Curric Dev.* 2020;7:1-10. doi:10.1177/2382120520956647
- 11. Yamada K, Slanetz PJ, Boiselle PM. Perceived benefits of a radiology resident mentoring program: Comparison of residents with self-selected vs assigned mentors. *Can Assoc Radiol J.* 2014;65(2):186-191. doi:10.1016/j.carj.2013.04.001
- 12. Geraci SA, Thigpen SC. A review of mentoring in academic medicine. *Med Educ Educ.* 2017;353(3):151-157. doi:10.1016/j.amjms.2016.12.002
- 13. Stubbs B, Krueger P, White D, Meaney C, Kwong J, Antao V. Mentorship perceptions and experiences among academic family medicine faculty. *Can Fam Physician*. 2016;62:e531-539.
- 14. Thorne ABS, Amerine LB. Formalized mentorship program for newly hired pharmacists. Am J

- Heal Pharm. 2016;73(16):1209-1210. doi:10.2146/ajhp150362
- 15. Cox MGM. The Situational Mentor: An International Review of Competences and Capabilities in Mentoring. Gower; 2007.
- 16. Tourigny L, Pulich M. A critical examination of formal and informal mentoring among nurses. Health Care Manag (Frederick). 2005;24(1):68-76. doi:10.1097/00126450-200501000-00011
- 17. Cullen D, Shieh C, McLennon SM, Pike C, Hartman T, Shah H. Mentoring nontenured track nursing faculty: A systematic review. *Nurse Educ.* 2017;42(6):290-294. doi:10.1097/NNE.0000000000000394
- 18. Metzger AH, Hardy YM, Jarvis C, et al. Essential elements for a pharmacy practice mentoring program. *Am J Pharm Educ*. 2013;77(2):23. doi:10.5688/ajpe77223
- 19. Fornari A, Murray TS, Menzin AW, et al. Mentoring program design and implementation in new medical schools. *Med Educ Online*. 2014;19:24570. doi:10.3402/meo.v19.24570
- Chua WJ, Cheong CWS, Lee FQH, et al. Structuring mentoring in medicine and surgery. A systematic scoping review of mentoring programs between 2000 and 2019. *J Contin Educ Health Prof.* 2020;40(3):158-168. doi:10.1097/CEH.0000000000000308
- Kibbe MR, Pellegrini CA, Townsend CM, Helenowski IB, Patti MG. Characterization of mentorship programs in departments of surgery in the United States. *JAMA Surg.* 2016;151(10):900-906. doi:10.1001/jamasurg.2016.1670
- 22. Henwood S, Booth L. On becoming a consultant: A study exploring the journey to consultant practice. *Radiography.* 2016;22(1):32-37. doi:10.1016/j.radi.2015.03.013
- 23. Lin J, Chew YR, Toh YP, Radha Krishna LK. Mentoring in nursing: An integrative review of commentaries, editorials, and perspectives papers. *Nurse Educ.* 2018;43(1):E1-E5. doi:10.1097/NNE.0000000000000389
- 24. Race TK, Skees J. Changing tides: Improving outcomes through mentorship on all levels of nursing. *Crit Care Nurs Q.* 2010;33(2):163-174. doi:10.1097/CNQ.0b013e3181d91475
- 25. Bally JM. The role of nursing leadership in creating a mentoring culture in acute care enviornment. *Nusring Econ.* 2007;25(3):143-148.
- 26. Warnock GL. Developing a culture of mentoring. Can J Surg. 2006;49(3):164-167.
- 27. Choi AMK, Moon JE, Steinecke A, Prescott JE. Developing a culture of mentorship to strengthen academic medical centers. *Acad Med.* 2019;94(5):630-633. doi:10.1097/ACM.000000000002498
- 28. Giancola JK, Whitman B, Wilmott RW. Establishing a mentoring culture within the department: The role of the chair. *J Pediatr*. 2020;225:4-7.e3. doi:10.1016/j.jpeds.2020.02.014
- 29. Disch J. Rethinking mentoring. *Crit Care Med.* 2018;46(3):437-441. doi:10.1097/CCM.000000000002914

- 30. Nieuwstraten C, Huh A, Liu G, Davis K, Dolovich L. Developing, implementing, and evaluating a formal pharmacist mentorship program. *Can J Hosp Pharm*. 2011;64(2):123-130. doi:10.4212/cjhp.v64i2.996
- 31. Farrell B, Austin Z. Implementing a mentorship program for pharmacists integrating into family practice: Practical experience from the IMPACT project team. *Can J Educ.* 2010;143(1):28-36. doi:10.3821/1913-701X-143.1.28
- 32. Goff DA, Karam GH, Haines ST. Impact of a national antimicrobial stewardship mentoring program: Insights and lessons learned. *Am J Heal Pharm*. 2017;74(4):224-231. doi:10.2146/ajhp160379
- 33. Ubaka C, Brechtelsbauer E, Goff DA. International mentoring programs: Leadership opportunities to enhance worldwide pharmacy practice. *Hosp Pharm*. 2017;52(7):471-477. doi:10.1177/0018578717719375
- 34. Rueben A, Forsyth P, Thomson AH. Professional development beyond foundation training: a study of pharmacists working in Scotland. *Int J Pharm Pract.* 2020;28:165-172. doi:10.1111/ijpp.12585
- 35. Etzel AM, Alqifari SF, Shields KM, Wang Y, Bileck NB. Impact of student to student peer mentoring program in first year of pharmacy program. *Curr Pharm Teach Learn*. 2018;10(6):762-770. doi:10.1016/j.cptl.2018.03.009
- 36. Howard ML, Steuber TD, Nisly SA, Wilhoite J, Saum L. Pharmacy resident-led student mentoring program: a focus on developing mentoring skills. *Curr Pharm Teach Learn*. 2017;9(6):1123-1128. doi:10.1016/j.cptl.2017.07.005
- 37. Hendry G, Winn P, Wiggins S, Turner CJ. Qualitative evaluation of a practice-based experience pilot program for master of pharmacy students in Scotland. *Am J Pharm Educ.* 2016;80(10):165.
- 38. Sin JH, Pathickal SM, Li M. Establishment of a peer-mentoring program for student pharmacists. *Am J Heal Pharm.* 2015;72:1610-1611. doi:10.2146/ajhp140544
- 39. Witry MJ, Nguyen E, Patterson BJ. Faculty mentor perspectives of a formal mentoring program for student pharmacists: a qualitative study. *Inov Pharm.* 2015;6(4):220. doi:10.24926/iip.v6i4.402
- 40. Witry MJ, Patterson BJ, Sorofman BA. A qualitative investigation of protege expectations and proposition of an evaluation model for formal mentoring in pharmacy education. *Res Soc Adm Pharm.* 2013;9(6):654-665. doi:10.1016/j.sapharm.2012.08.003
- 41. Waghel RC, Wilson JA, Battise DM, Frye J. Reflections on a year-long student and pharmacist paired mentorship program. *Curr Pharm Teach Learn*. 2017;9:713-718. doi:10.1016/j.cptl.2017.03.026
- 42. Desselle SP, Chang H, Fleming G, Habib A, Canedo J, Mantzourani E. Design fundamentals

- of mentoring programs for pharmacy professionals (Part 1): Considerations for organizations. *Res Soc Adm Pharm.* 2021;17(2):441-448. doi:10.1016/j.sapharm.2020.04.015
- 43. Mantzourani E, Chang H, Fleming G, Desselle SP. Design fundamentals of mentoring programs for pharmacy professionals (Part 2): Considerations for mentors and mentees. *Res Soc Adm Pharm.* 2021;17(2):449-455. doi:10.1016/j.sapharm.2020.04.024
- 44. Schwerdtle P, Morphet J, Hall H. A scoping review of mentorship of health personnel to improve the quality of health care in low and middle-income countries. *Global Health*. 2017;2017(13):77-85. doi:10.1186/s12992-017-0301-1
- 45. Byrne MM. Understanding life experiences through a phenomenological approach to research. AORN J. 2001;73(4):830-832. doi:10.1016/S0001-2092(06)61812-7
- 46. Guba EG. The Alternative Paradigm. (Guba EG, ed.). London: SAGE; 1992.
- 47. Polkinghorne DE. Language and meaning: Data collection in qualitative research. *J Couns Psychol.* 2005;52(2):137-145. doi:10.1037/0022-0167.52.2.137
- 48. Allen TD, Eby LT. Common bonds: An integrative view of mentoring relationships. In: *The Blackwell Handbook of Mentoring*. Oxford, UK: Blackwell Publishing Ltd; 2007:397-419. doi:10.1111/b.9781405133739.2007.00024.x
- 49. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: Guided by information power. *Innov Methods*. 2016;26(13):1753-1760. doi:10.1177/1049732315617444
- 50. Guest G, Bunce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. *Field methods*. 2006;18(1):59-82. doi:10.1177/1525822X05279903
- 51. Mantzourani E, Chang H, Desselle S, Canedo J, Fleming G. Reflections of mentors and mentees on a national mentoring programme for pharmacists: An examination into relationships, personal and professional development. *Res Soc Adm Pharm.* 2021. doi:10.1016/j.sapharm.2021.04.019
- 52. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77-101. doi:10.1191/1478088706qp063oa
- O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: A synthesis of recommendations. *Acad Med.* 2014;89(9):1245-1251. doi:10.1097/ACM.000000000000388
- 54. Lincoln YS, Guba EG. *Naturalistic Inquiry*. (Guba EG, ed.). Beverly Hills, CA: Sage Publications; 1985.
- 55. Mantzourani E, Chang H, Desselle SP, Canedo J, Fleming G. Reflections of mentors and mentees on a national mentoring programme for pharmacists: An examination into relationships, personal and professional development. *Res Soc Adm Pharm*.
- 56. Shanks R, Tonna MA, Krøjgaard F, et al. A comparative study of mentoring for new teachers.

- Prof Dev Educ. 2020. doi:10.1080/19415257.2020.1744684
- 57. Litano ML, Major DA. Facilitating a whole-life approach to career development: The role of organizational leadership. *J Career Dev.* 2016;43(1):52-65. doi:10.1177/0894845315569303
- 58. Sheridan L, Murdoch NH, Harder E. Assessing mentoring culture: Faculty and staff perceptions, gaps, and strengths. *Can J High Educ*. 2015;45(4):423-439.
- 59. Bryant AL, Brody AA, Perez A, et al. Development and implementation of a peer mentoring program for early career gerontological faculty. *J Nurs Scholarsh.* 2015;47(3):258-266. doi:10.1111/jnu.12135
- 60. Burgess A, Van Diggele C, Mellis C. Faculty development review mentorship in the health professions: A review. *Clin Teach*. 2018;15:192-202. doi:10.1111/tct.12756
- Lin CD, Blossom YJL, Lin CC, Lee CC. Redesigning a clinical mentoring program for improved outcomes in the clinical training of clerks. *Med Educ Online*. 2015;20:28327. doi:10.3402/meo.v20.28327
- 62. Greene MT, Puetzer M. The value of mentoring: A strategic approach to retention and recruitment. *J Nurs Care Qual.* 2002;17(1):63-70. doi:10.1097/00001786-200210000-00008
- 63. Nick JM, Delahoyde TM, Prato D Del, et al. Best practices in academic mentoring: A model for excellence. *Nurs Res Pract*. 2012:Article 937906. doi:10.1155/2012/937906
- 64. Nowell L, Norris JM, Mrklas K, White DE. A literature review of mentorship programs in academic nursing. *J Prof Nurs*. 2017;33:334-344. doi:10.1016/j.profnurs.2017.02.007
- 65. Klinge CM. A conceptual framework for mentoring in a learning organisation. *Adult Learn*. 2015;26(4):160-166. doi:10.1177/1045159515594154
- 66. Tinoco-Giraldo H, María E, Sánchez T, García-Peñalvo FJ. E-mentoring in higher education: A structured literature review and implications for future research. *Sustainability*. 2020;12:4344. doi:10.3390/su12114344
- 67. Ng YX, Yong Z, Koh K, et al. Assessing mentoring: A scoping review of mentoring assessment tools in internal medicine between 1990 and 2019. *PLoS One*. 2020;15(5):e0232511. doi:10.1371/journal.pone.0232511
- 68. Yip J, Kram KE. Developmental networks: Enhancing the science and practice of mentoring. In: Clutterbuck D, Kochan F, Lunsford L, Dominguez N, Haddock-Millar J, eds. *The SAGE Handbook of Mentoring*. Thousand Oaks, CA: Sage Publications Ltd; 2017:88-104. doi:10.4135/9781526402011.n6
- Amin MEK, Nørgaard LS, Cavaco AM, et al. Establishing trustworthiness and authenticity in qualitative pharmacy research. Res Soc Adm Pharm. 2020;16:1472-1482. doi:10.1016/j.sapharm.2020.02.005

Table 1. Features of the RPS mentoring programme as it was introduced in 2019

Mentoring models and relationships	Nature of mentoring	The RPS mentoring programme was a flexible, blended dyad mentoring model, offering face-to-face mentoring, telephone mentoring, and e-mentoring. Mentees and mentors agreed on an approach that best suited their needs and mentoring style, which could have changed as the mentoring relationship developed.	
	Selectivity in matching dyads	Mentor-mentee matching was facilitated through automated process within the platform, and was based on skills, experience, desired sector of practice, location, preferred length of mentoring relationship and format of mentoring. Mentees were presented with mentors that most closely match their inputted preferences but could also search across the full list of mentors. Mentors had to accept or decline mentoring requests. Only when a mentor accepted a request, a relationship was confirmed as established.	
	Mentors within or outside organisation	Mentees were encouraged to seek mentoring outwith their own place of employment to extend their networks. Mentors were drawn from the pharmacy profession from different sectors of practice, including community pharmacy; hospital pharmacy; general practice; the pharmaceutical industry; and academia and education. Some mentors also had niche roles in prison pharmacy; care homes; media and publishing; and in government bodies. Retired pharmacists could also register with the platform.	
	Administrative support	Mentees and mentors had access to user videos and troubleshooting information about the platform. Technical support on how to navigate the platform and solve functionality and connectivity issues was provided by administrative coordinators.	
Delivery and structures of schemes	Communication	The initial contact between mentors and mentees was conducted within the platform via an online messaging feature linked to emails. Thereon after, individuals could continue to communicate within the platform or choose more direct communication methods, such as email or phone messaging. Mentors and mentees agreed the frequency and level of communication according to their preferences and availability. Mentoring discussions could be documented within the platform using online meeting templates, generating account of one's development journey which could be subsequently mapped to continuing professional development, regulatory revalidation requirements, employment appraisals and learning portfolios.	
	Cost	The programme was open to all registered members of the RPS, which is associated with an annual membership fee. There was no additional cost for members to use the programme as a mentor or mentee. The costs of implementation and maintenance of the programme were managed by the RPS.	
	Technology	The platform had been designed to be accessible on modern devices including mobile phones and tablets. It facilitated	

		automated matching and contained online messaging capabilities. At its inception, it was not linked to communication
		technology, such as video conferencing software or social media platforms.
	Mentoring culture	Through the provision of a mentoring programme, the RPS aimed to promote the benefits of mentoring to the pharmacy profession, subsequently inspiring pharmacists to participate in and embrace mentoring.
		The ultimate goal was to instil a mentoring culture across the profession. Mentees are encouraged to become a mentor using their experiences of mentoring, contributing to the continual population of the mentor pool.
	Programme and/or individual	The RPS set programme goals to ensure the needs of users are met, whilst mentors and mentees set individual goals.
Goals		Mentees were prompted to set goals before embarking in mentoring relationships to help focus their mentor search. Goal setting resources, including a SMART action template, SWOT analysis tool and G-STAR model tool were available to both mentors and mentees. The tools could be used as preparation for mentoring activities, providing structure for discussion and action.
	Benefits for employers	Whilst the RPS did not directly benefit from the outputs of mentoring relationships, it was anticipated that employers would benefit as mentees 'grow' whilst being mentored, and once their goals are fulfilled. It is recognised that mentees who have developed personally and professionally are more likely to be more motivated and productive within the workplace.
Development of mentors and mentees	Preparation	The RPS did not offer formal mentoring training to mentors or mentees, neither was it compulsory to complete such training, however individuals have access to a plethora of online guidance (written materials, videos, and blogs) to facilitate mentoring skills development, which could be consumed as required.
		Upon registering on the platform, mentors had to self-declare their suitability to provide mentoring and were recommended to address any relevant learning gaps before proceeding. Furthermore, mentors were recommended to openly share their level of mentoring experience and competence as a pharmacist with mentees, to facilitate a decision on whether they are best suited to support their mentee in reaching their goals.
	On-going support	Mentors and mentees could access online guidance provided for the preparation of mentoring to refresh their knowledge as required.
Evaluation	Individual	Mentors and mentees were not prompted to reflect upon their mentoring experience. Nevertheless, it was acknowledged that it is good practice to take a reflective approach to development. A reflection template and guidance were available on the RPS website, should an individual wished to use for their reflective practice. However, the template was not integrated into the mentoring platform.

	Mentors and mentees could provide views and comments on any aspect of the programme at any point during the mentoring relationship by directly contacting the administration team.
Programme evaluation	Mentors and mentees completed a satisfaction survey at the end of the mentoring relationship. This was delivered online within the platform. The survey provided the RPS with insights of user satisfaction and perceptions of platform usability.

Table 2: Representative quotes from participants in the study, as aligned to the themes arising from thematic analysis. P: participant number; F/M: female/male.

1. Attitudes towards mentoring and shifting culture to increase engagement		
1.1 Prior experience of mentoring and impact on willingness to engage	"In hospital pharmacy, ummcertainly my experience in you know [in] teaching hospitals is seen as you've been in the departments longer than somebody else, you know. I think you're no longer the newbie, then you, you start looking after those people to certain extent. Ummand helping them and getting them settled in and all that kind of thing". (P13, F, mentor)	
	"I had a mentor from that which was kind of a very different experience than my normal mentoring because we couldn't find the common grounding" (P3, F, mentor)	
	"You're always sort of wondering [as a mentor] if the mentee getting the best out of the relationship. UmmI mean, if they achieved their goal, that's great. But umm I don't know if it's out of politeness or what it is. But it's, it's difficult to, for a mentor to understand if you're getting the best out of your mentee." (P9, F, mentor/mentee)	
1.2 Factors that impact the individual's capacity for investing in a mentoring journey	"A lot of the people who may put themselves forward as mentors at the moment are so busy. And I think particularly it was the coronavirus, I think people would just be at the end of their capacity really, at that moment." (P11, F, mentor)	
	"I think maybe if you market it, like, 'oh, you can do it as a CPD,' maybe they are more encouraged to do it Yeah, like because people are struggling to do like revalidation, like peer discussions, and you market it, 'oh, actually you can do this as yourone of your CPDs entries. Or maybe you can, to help you to ummdo like peer discussion or you can enter it as a revalidation thing'." (P16, F, mentee)	
	"There's a barrier [to engagement]. It's getting people into the Society and then offering them [mentoring] And certainly, now that, you know, I think people are very worried about the cost of everything." (P14, F, mentor)	
1.3 Feeling valued: attitudes towards recognition linked to formal rewards process	"There could be an award ceremony so you know outstanding mentor of the year or things like that. Things that almost help people to do better I mean this does not make a difference to me personally it really doesn't. Um but I think a lot, it probably would make a difference." (P3 F, mentor)	
2. Mechanisms and structures that facilitate mentoring		
2.1 Perceptions of usefulness and need for	"Because of my experience with mentoring I was confident to approach it without referencing the material" (P1, M, mentor)	
structured training and resources	"It was good to understand [resource available explaining about the structure of the scheme], it was helpful, good to understand how it all worked." (P12, M, mentor)	

	"More reflective models? More mentoring models? More case studies [would be helpful for developing mentors and mentees]." (P7M, mentor/mentee)
	"How you accredit people to be that [a mentor] and without creating a lot of work that puts people off in the first place." (P18, F, mentor)
2.2 Support via digital infrastructure and perceived limitations	"It's [platform] quite good in terms of when you sign up you can put lots of options in terms of your experience and the types of things you're interested in, for both as a mentor and a mentee." (P4, F, mentor)
	"The thing is with initial contact you have to log into the RPS system you It'd be so much easier if you could just email them directly once you have said yes to them." (P2, F, mentor)
	"I find uh videos [conversations] a bit awkward. Umm even when I'm doing a Skype call or something, I don't tend to connect my camera and I find that quite awkward." (P9, F, mentor/mentee)
	"[Improvements]like an evaluation questionnaire an anonymous online ummquestionnaire where students have predetermined uhquestions or standards and then they have a scale on which to respond. Ummso, that could be ummyou know, things along the lines of, 'was your mentor available when you wanted them to be ummdid your mentor provide,' you know, like, asking those kind of questions, 'did, did your mentor give you, provide you with support that you wanted? Did they communicate in a, in a good way?' You know, all of, all of those kinds of things." (P10, F, mentor)
2.3 Supporting further development of individuals outside of a mentoring relationship	"It's [mentoring] not a skill that anyone is born with, yeah or feel they, 'oh yeah, I'm definitely a mentor,' it's more something that perhaps, you know, you develop over time so giving people support from other mentors, 'oh, this is what I did,' or you know" (P10, F, mentor)
	"Some people [who would like to get a mentor] are anxious about, you know, 'what do I ask a mentor', 'what how, how're they gonna [sic] help me' you know? 'What can they do for me? What am I supposed to ask them? How can I ask them questions like, oh what did you when you were younger', some people don't feel comfortable with that. And they think having sessions for them almost embraces the fact that they can ask us [mentees] anything and that it's not daunting." (P3, F, mentor)

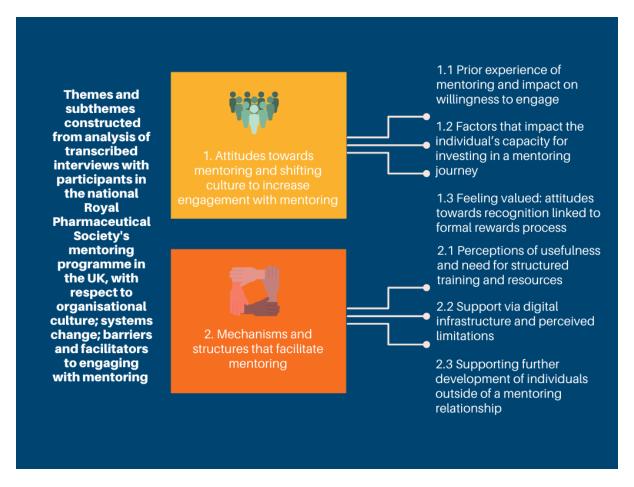


Figure 1: A summary of the subthemes for the two themes with respect to mentoring attitudes and culture, and mechanisms that facilitate mentoring, as arising from thematic analysis of the data.

Supplementary Information

Supplementary Table 1. Extract from the topic guide used for the semi-structured interviews of mentors and mentees participating in the RPS's mentoring programme

Exploring pharmacy professionals' attitudes and perceptions on mentoring and the Royal Pharmaceutical Society's mentoring scheme

- Tell me a bit about your career journey so far
 - Prompts: Current role; experience in role/how long; other roles
- Tell me about any experiences with mentoring prior to signing up to the RPS's current scheme
 - o Prompts: Formal/informal
- How about the current scheme...tell me about why you decided to join?
- How did you engage with the support materials RPS provided prior to being matched with a mentor/mentee?
 - Need for support; how did you find them; what else would increase your levels of preparedness
- Tell me about your current mentoring relationship, via the RPS's scheme
- Prompts: How does the scheme meet your expectations so far; anything that challenged you; impact on practice/development

- We talked about support materials earlier...what else do you think would enable further support, so pharmacy professionals can engage more in mentoring relationships?
- We talked about [summarise challenges mentioned by participant] earlier...what else do you think is a challenge for pharmacy professionals to engage more in mentoring relationships?

Prompts:

What do you mean by that?
Why do you think that?
Thank you for that.
Could we come back to that later?
Can you give me an example?

Supplementary Table 2. Standards for Reporting Qualitative Research (SQRS) checklist

Number	Topic	Item	Page number
S1	Title	Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended	1
S2	Abstract	Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions	1
S3	Problem formulation	Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement	2-4
S4	Purpose or research question	Purpose of the study and specific objectives or questions	4
S5	Qualitative approach and research paradigm	Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/ interpretivist) is also recommended; rationale	4
S6	Researcher characteristics and reflexivity	Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, and/or transferability	5
S7	Context	Setting/site and salient contextual factors; rationale	3-4, Table 1
S8	Sampling strategy	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale	4-5
S9	Ethical issues pertaining to human subjects	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	4
S10	Data collection methods	Types of data collected; details of data collection procedures including (as appropriate) start and stop	4-5

			l
		dates of data collection and analysis, iterative	
		process, triangulation of sources/methods, and	
		modification of procedures in response to evolving	
		study findings; rationale	
S11	Data collection	Description of instruments (e.g., interview guides,	4-5,
	instruments	questionnaires) and devices (e.g., audio recorders)	Supplementary
	and	used for data collection; if/how the instrument(s)	Table 1
	technologies	changed over the course of the study	
S12	Units of study	Number and relevant characteristics of participants,	5
		documents, or events included in the study; level of	
		participation (could be reported in results)	
S13	Data	Methods for processing data prior to and during	4-5
	processing	analysis, including transcription, data entry, data	
		management and security, verification of data	
		integrity, data coding, and	
		anonymization/deidentification of excerpts	
S14	Data analysis	Process by which inferences, themes, etc., were	4-5
	,	identified and developed, including the researchers	
		involved in data analysis; usually references a	
		specific paradigm or approach; rationale	
S15	Techniques to	Techniques to enhance trustworthiness and	5,
	enhance	credibility of data analysis (e.g., member checking,	Supplementary
	trustworthiness	audit trail, triangulation); rationale	Table 2
S16	Synthesis and	Main findings (e.g., interpretations, inferences, and	5-12
	interpretation	themes); might include development of a theory or	
		model, or integration with prior research or theory	
S17	Links to	Evidence (e.g., quotes, field notes, text excerpts,	5-12, Table 2
0 11	empirical data	photographs) to substantiate analytic findings	0 12, 145.02
S18	Integration	Short summary of main findings; explanation of how	12-14
0.0	with prior work,	findings and conclusions connect to, support,	
	implications,	elaborate on, or challenge conclusions of earlier	
	transferability,	scholarship; discussion of scope of application/	
	and	generalizability; identification of unique	
	contribution(s)	contribution(s) to scholarship in a discipline or field	
	to the field	Contribution(b) to contribution in a dicolphine of hold	
S19	Limitations	Trustworthiness and limitations of findings	14-15
S20	Conflicts of	Potential sources of influence or perceived	15
320	interest	influence on study conduct and conclusions; how	
		these were managed	
S21	Funding	Sources of funding and other support; role of	15
]		funders in data collection, interpretation, and	. •
		reporting	
	1	1	1