'It wasn't just the academic stuff, it was life stuff': the significance of peers in strengthening the Indigenous health researcher workforce

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Abstract

Health research remains a vital activity of Indigenous health workforces. This paper reports on the main findings of yarning interviews with 14 Indigenous researchers, that was central to a project analysing the role of research training infrastructures in strengthening the Indigenous health research workforce in Australia. The findings highlighted Indigenous researcher peers as core sources of inspiration, moral support and sustenance in academia and in life. Peer generative power arising from peer groups provide a unique enriching to the educational and research experience. Indigenous researcher peers have a strong shared aspiration to champion change to health research and higher education as a key pathway to widespread positive impacting on health and well-being. We suggest the (revived) development at a collective level of a strategic and planned approach to capitalising on the positive outcomes of peer generated leadership and support.

Introduction

Indigenous health researchers produce internationally significant research and support the larger Australian health workforce (Ewen *et al.*, 2019*a*). Health research education and supportive research workplaces are central to the continued growth and success of the Indigenous health researcher workforce. Drawing on qualitative interviews with emerging and established Indigenous health researchers, this paper demonstrates the significance of Indigenous peer relations and peer support central to successful research training and research work. By 'Indigenous peers' we mean Aboriginal and Torres Strait Islander peoples involved together in conducting any formal research and research-related learning (e.g. research fellows co-learning participatory research; Masters student and the supervisor; research-active health worker partnering with a Professor). What we report is hoped to lead to a reconsideration of the 'place' of peer solidarity as it is rarely contended to be a priority in 'research capacity building' and workforce planning.

Background

Tracking progress and improving all realms of health services (e.g. health administration and care provision) relies heavily on research (Liburd *et al.*, 2020). The various health professions and disciplines (e.g. surgery, nursing and optometry) depend on ongoing research to identify, understand and improve on effectiveness in healthcare (Prihodova *et al.*, 2018). Indigenous researchers lead rigorous and relevant health knowledge production (e.g. Eades *et al.*, 2012; Harfield *et al.*, 2020). As Indigenous peoples often enter higher research degrees and employment after accomplishments in the community and the professions, they contribute to enriching learning in research and heighten the translate-ability of research into health practice (Ewen *et al.*, 2019*b*). Although the Indigenous health workforce in particular may seek new knowledge from the Indigenous academes to inform better practices, the learning from Indigenous-led research is needed from all members of the Australian and international health workforces. It is also important to note that health sectors are the largest source of employment of Indigenous peoples (Australian Bureau of Statistics, 2018).

For all these reasons, strengthening the growth of the Indigenous health researcher workforce should be a high priority. However, the health and higher education landscape is subject to prevailing outcomes of colonisation (Sherwood, 2013). A paradigm shift is underway that inverts the deficit framework (Herbert, 2012; Vass, 2013), led by Indigenous peoples worldwide and takes place at the intersections of: redefining research approaches and creating a strong body of knowledge in Indigenous methodologies and pedagogies (Smith, 2012; Diamond and Anderson, 2019); organisational structures, processes and

partnerships prioritising community shaping of research agendas, implementations and uses (Bond *et al.*, 2016); establishing and upholding cultural awareness, competencies, safety and responsiveness (Fleming *et al.*, 2019; Opie *et al.*, 2019; Te *et al.*, 2019); solidifying consensus on data sovereignty (Kukutai and Taylor, 2016); greater control of decisions on research funding (Street *et al.*, 2007); increasing social media influence (Sweet, 2013); greater whole-of-government and whole-of-university policy orientations to Indigenous higher education and workforce development (Australia and Torres Strait Islander Higher Education Advisory Council, 2015); stronger positioning of Indigenous peoples in university governance (Page *et al.*, 2017) and growing recognition of the institutional obligations for comprehensive incorporation of Indigenous rights, standards and knowledges (Jones *et al.*, 2019). Transformative change is growing across the diversity of disciplines underlying health research.

A common element to the developments outlined above appears to be Indigenous peoples working together to learn more about and champion research, thereby utilising research for change. Yet, in the global literature on what is normally called 'research capacity building', the usual themes are categorised as pipelines, funding, supervision and mentorship and inter-organisational partnerships (Beran *et al.*, 2017; Matus *et al.*, 2018). Although these elements of research are important, there is a growing literature that collectively suggests a re-consideration of the notion that peers are at the periphery of health research education and workforce policy (Glass and Walter, 2000; Pololi and Knight, 2005; Flores-Scott and Nerad, 2012).

The educational research literature on peers is diverse, such and framed around social capital (Mishra, 2020), collegiality (Jacelon *et al.*, 2003) and social support (Pyhältö *et al.*, 2017). Peers figure positively in experiences of research education, research employment and research collaboration—during PhD candidature (Meschitti, 2019), early career (Pyhältö *et al.*, 2017), mid and later career (Agee and Li, 2018). Peer relationships appear to be important instigators in creating more supporting spaces in research and education settings, especially local peer-initiated groups (Esposito *et al.*, 2017) —for instance, women supporting one another during the PhD (Barata *et al.*, 2005), and career progression at the faculty level (Elg and Jonnergard, 2003; Hernandez *et al.*, 2015). For Indigenous researchers specifically, journey-long narratives of peers and mentoring have been provided through autobiographical accounts (Bainbridge *et al.*, 2016) as well as reflective pieces on presenting at and taking part in Indigenous health conferences (Bessarab *et al.*, 2009; Roe *et al.*, 2010).

Research to inform strategic strengthening and extension of the Indigenous workforce is paramount (Gwynne and Cairnduff, 2017; Gwynne and Lincoln, 2017; Wright *et al.*, 2019). Accordingly, the Lowitja Institute funded a research project to review the development of the Indigenous health researcher workforce in Australia with a focus on success factors tied to research training models. A resounding finding of this project was the importance placed by Indigenous researchers on their fellow peers, that we describe as 'peer generative power'. In the main report on the findings of this project we outlined antecedents, functions and outcomes of peer generative power (see esp. Ewen *et al.*, 2019*b*, pp. 30–31).

The current paper provides an extended and deepened account of peer generative power by reporting on several sub-themes that emerged from further analysis of the interview data. In particular, we detail how peer generative power enhances the research training experience and experiences of research workplaces. We go on to emphasise the strengths-based significance of the micro-dynamics of relationships between Indigenous peoples in research capability strengthening. A close consideration of peer generative power should inform workforce development strategies to build on the successes of Indigenous health researchers and communities.

Method

The research utilised a cross-sectional qualitative interview study. Guided by Decolonising Methodologies (Smith, 2012) and Standpoint Theory (Collins, 1986), this research intentionally privileges Indigenous voices, experiences and ways of doing and being in Australian health researcher training.

Participants

Fourteen Indigenous health researchers participated in the interviews. Most participants were either completing a higher research degree and/or employed in research and teaching roles at a university in Victoria, New South Wales or Queensland. Four participants were undertaking PhDs, seven were early-career, two were mid-career and one was a later-career researcher. Two were employed in government research positions. Formal titles held by participants included Professor, Lecturer and Research Fellow (with further details left out to ensure anonymity). Nine interviewees were female and four were male. The health research areas were diverse, with subjects including nursing education, racism and health, disease rates, international health comparisons, health service evaluation, alcohol and other drugs.

Ethics

This research study was reviewed and approved by the University of Melbourne Human Research Ethics Committee (ID 1750826). On the consent form, prospective participants could nominate whether one wanted to be identified in reporting of findings, such as one's name cited with a quote from the interview. All interviewees nominated not to be identified.

Interviews

Yarning semi-structured interviews were conducted by an Indigenous researcher (TR). Yarning is a highly relational and relatively informal interview style (Bessarab and Ngandu, 2010) that has 'familiarity as an everyday process of communication for Indigenous people', that 'enables Indigenous people to talk freely about their experiences, thoughts and ideas', leading to data that is highly meaningful and precise (Walker *et al.*, 2013). The interview format was also semi-structured and guided by these question areas: interests in and pathways into health research, experiences of informal and formal research education, plans over the next 5 years and views on how to further advance the health researcher workforce. Two-thirds of interviews were conducted on live feed or telephone and the other-third in person. The average interview duration was 44 minutes. All interviews were digitally recorded and took place in the middle months of 2018. Transcription of interview recordings was completed by a service independent of the project team.

Data analysis

Identified themes emerged from close analysis of interview narratives and listening to audio recordings. Two researchers (TR and

CPP) independently interpreted and coded the data. Coding was conducted manually on hard and electronic copies. These researchers then discussed their respective analyses and presented the interim findings with selected quotes to the third researcher (SE), followed by team discussion. Although the overarching (main) theme was clear at this point, the process just described was repeated to come to a deeper interpretation of the data, culminating in a reworking of the sub-themes. Before these transcript-based analyses took place, it is highlighted that the yarning interviews represented peer-to-peer (albeit temporary) formations where recognition and understanding of the importance of peers, peer capacity and cohort strengths was immediately apparent and shared.

Results

The main theme was peer generative power. The production and reproduction of peer power is multi-fold, processual and emergent. Joint peer relationship building, learning and research work is essentially generative, for instance, peers collectively generate strengthened confidence in excelling in health research as Indigenous, impel successive generations of Indigenous researchers and innovative research collaborations. In terms of sub-themes, we proceed from immediate peer-to-peer manifestations of this power to the development of new peer groups in research courses and the potential to better utilise peer generative power at the national level.

Peer generative power: 'It wasn't just the academic stuff, it was life stuff'

An Indigenous researcher who had recently completed a PhD stated below, and captured best what others brought up in specific ways:

'…peer researchers the other Indigenous researchers, I learnt a great deal from them and it wasn't just the academic stuff, it was life stuff'. (Int11)

A prime example of 'academic stuff' for those becoming acquainted with research was meeting and learning through peers about the steps in a postgraduate degree and academic learning:

'[it is] a really good experience to just talk to other PhD students that are sort of going through the same process, and just get an understanding of what's required'. (Int2)

The same interviewee also stressed the importance of learning across disciplines that is enabled through meeting peers. Health research, including Indigenous health research, is broad, covers many disciplines and is multi-layered and complex. Multi-disciplinary learning to become a researcher strongly positioned to address complex health challenges is cultivated by group-based learning formats that combined people who had so much to contribute to other peers but were working solitarily in daily life:

'I think any opportunities to bring people together from the various disciplines helps…like say in health you know being about holistic…when we're around researchers from other disciplines, that helps us be really truly holistic too, so not just within your discipline but cross-fertilising.

And that kind of helps because we're all small in numbers so there's not that many…so it makes sense to bring everyone together'. (Int2)

Similarly, for another Indigenous researcher, it was seeing peers as role models and what could be achieved in academia. For example, this PhD candidate talked about experiences that spurred pursuit of further impactful research, including seeing peers presenting on their work:

'….a little bit of a presence of Indigenous postgraduate students at the university was… really helpful…kind of admiration of them and what they were doing…I found that extremely inspiring [and] you can't underestimate that stuff because once you see that other people make it possible, it starts something that gets you thinking about what else might be possible and what else you could possibly do'. (Int9)

For interviewees employed in research, the 'academic stuff' was the workplace as a strong base for ongoing development:

'The [Research centre] was a great place to get experience and build networks and learn from a whole range of different people working in the space, and that formed a really good sort of centre for me and I got all the skills working there'. (Int 6)

In turning to the 'life stuff', it was about matters within the institution as well as outside of it—for instance, good quality of life and the predicaments of being marginalised on top of barriers encountered by all in research workplaces, for example, high academic workloads. Being with peers was a unique source of enjoyment of research work and education:

'Probably the networking with other Aboriginal and Torres Strait Islander people working in health or working in anything related to research. I think that's probably been the best part, and probably the part I enjoy the most'. (Int3)

However, as touched on in quotes about higher education and research workplace settings in Appendix A (see also Ewen *et al.*, 2019*b*, pp. 29–30), there are opportunities as well as non-remunerated workloads, non-recognised contributions, the persistence of related problems of othering, discrimination and prejudice and resistance of some non-Indigenous colleagues to Indigenous control of health research. A PhD graduate at a large Australian university stated the following, when reflecting on being constantly questioned and judged on one's presence in research, such as imputing on Indigeneity and academic legitimacy based on skin tone. It was these types of experiences of ethnic marginalising/racism and colourism that were part of the 'life stuff':

'I just want to do my work….and I couldn't be fucked facing those questions or those judgements…I just want to be judged on my work'. (Int7)

Peer-to-peer care: 'We need to be nurturing and…looking after each other'

Within the 'life stuff' is the 'task' of traversing multiple cultures and often conflicting expectations and commitments. Being in higher education and research institutions as part of one's life was regularly summed up as rotating between and coalescing family, community and academy, with a strong desire to effect

change. Taking on the accumulation of demands and obligations as an isolated individual was psychologically distressing. A mid-career researcher described the importance of interpersonal relationships with peers in such contexts:

> '…there's a broad range of commitments which start at the family level and the community level and the institutional level as in within the institution…. then your mental health suffers and then you become ineffectual at everything [laugh] and what's the point right? So we need to be nurturing each other and looking after each other and not burning out'. (Int5)

Often such needs were partially met through instant understanding and recognition during a yarn—as one interviewee comments on when discussing a peer, the competing pressures in the research workplace:

> 'You say a few words and then you're like "yeah" and like you know and kind of understand where they're going with that. You do have that cultural load; there are different expectations and different things when you're in a research environment…'. (Int1)

This type of support and resonance came from shared lived experiences. A PhD candidate put it this way:

> '…you look around for support and the support can't come from other academics because they don't…most of them are non-Indigenous and they don't know what you're going through as an Indigenous person'. (Int15)

The unique support and nurturing between peers also lay in pivotal moments that had enduring positive impact. For example, a senior research academic reflected on a fellow peer as a major role model, admiring her for her courage and extensive experience with communities. This researcher had had a traumatic experience during research work with a community, and the peer was invaluable in providing a new perspective on her personal experiences:

> 'I've had a couple of conversations with her and that buoyed me up for a long time you know…she said "we always blame our own and that's what happened to you". And it was like a huge weight was lifted up off my shoulders, and nobody could have told me that except from somebody who had lived experience of what it's like to work in community. So that really helped me…I wouldn't have got through without her'. (Int4)

Additionally, a PhD candidate, remarking on the isolation of the Higher Degree by Research journey, pointed out how turning to peers and having that source of support was so important:

> 'To be able to have a peer support network and a couple of the people I've sort of got closer relationships with…I've been able to just touch base with them a few times…I think that could be a good way to just get a bit of that moral support when you're going through your PhD'. (Int2)

Although sometimes there would be chance meetings with peers, such peer relations were often cultivated in formal research education programmes purposed with cohort building and peer co-presence in research learning and collaboration. A well-established academic talked about isolated students, one's own experience of isolation, and how vital it was to link up with peers through the group that amplified individual perseverance and self-belief. During the PhD that person had some challenges and being with peers made all the difference:

> 'I would never have finished my PhD had it not been for the [research cohort-based training program] I did …I think that sometimes you just need to have you know a critical friend [peer] and sometimes it is really difficult to find and anybody who's able to help an Indigenous student…a couple of times when I thought "oh, bugger this, I can't do it", and you know you don't go back to it for a year, which I did a couple of times, you know, you've always got somebody in your corner and that's what you need'. (Int4)

Shared journeys and cohort building rituals: 'It was almost like a cloak'

The cohort-focused type of research training mentioned above is one of the major processes involved within Indigenous research education. Research training groups were of peers from diverse kinship groups getting together, often gathering for the first time. Indigenous peoples were rapidly identifying shared affinities amongst each other, sharing common experiences of witnessing poorly conducted research by non-Indigenous peoples, driving changes to health research which ultimately improve health outcomes and working together to overcome. The most detailed reflection on experiences that spoke closely to the narratives of other interviewees, was from Interviewee 13. This participant completed a PhD within a cohort-based programme that brought together Indigenous people from different parts of Australia, stating:

> '….[peers] that was the best bit about it, like having other blackfellas around you who were on exactly the same stage of the journey and then every now and then other people started to go ahead and fall behind, and I think you really defaulted to an Aboriginal way of supporting your way through and up that process. So I think within that we almost…replicated what is an Aboriginal community within that space, so the support for each other, the validation of our knowledges, the sharing of the challenges and the fear, and then as we got closer to the end there's the challenges of the fear of success and then what that means… the blackfellas around you helped to remind you why you were doing it, and others that had been through it who could share their experience…'. (Int13)

The value of research training environments committed to inter-cultural learning was recounted. There was gained confidence from being with peers, wherein the scope for open mindedness and explorative learning was much wider, and generated better scholarship and enhanced learning. The programme enabled opportunities to learn about and deploy Indigenous research methodologies both by travelling to courses and allowing those methodologies to be applied in conjunction with 'mainstream' ones in the central locality:

> '…having the Indigenous cohort going through, that was validation and give you the strength and the confidence for you to be able to stand your position…we were fortunate enough to attend conferences where they spoke about Indigenous methodologies. So there were other strategies that were put in place that balanced the dominant cultural paradigm, so within that space it wasn't the dominant. It was actually Indigenous methodologies that were dominant but only in that space, and I have been part of that space, I don't think I would have had that luxury or that privilege because it was almost like a cloak. It was protective space that just allowed you just to be and it allowed you to trial and test and say stuff, whereas you couldn't with a panel of non-Indigenous supervisors'. (Int13)

Almost as if taking a different angle on the notion of a 'critical friend', this participant went on to describe how part of criticality

is constructive feedback on one's research work that is free of prejudice, permitting one to have an academic identity and exercise one's intellect:

> '….you may be critiqued and all that sort of stuff, but you're not dealing with any subliminal racism or subliminal stereotyping or that sort of stuff…when you're with your own mob they're the people that work with our lot that are good people, you just get on and you complete the task and you just go yeah, I'm a PhD person, I'm a researcher. I'm just going to research this and it's a good topic you know'. (Int13)

A different interviewee also raised Indigenous methodologies in a group learning format. For this person, Indigenous knowledges provided a critical scaffolding for careful reflection and decision-making on identity in research:

> 'I think those Indigenous methodologies are really important… it's a fundamental thing that if we are going to use our identity in this space, we should have a really clear understanding of where we're coming from if we're going to use that [Indigenous methodologies] in our work'. (Int2).

Again, the nurturing of such spaces was in settings where the everyday orientation was actually in assuring the ease of non-Indigenous peoples. For instance, an Indigenous researcher running a cross-university Indigenous student support group talked about how the pressing for support came from non-Indigenous peoples. Although very willing to help non-Indigenous students up to a point, the ultimate purpose was not that:

> 'We're not here to educate other students, we're here for us…[laughs] we're here for making a safe space for us'. (Int9)

Informal networks: 'a glue that we could expand on'

As earlier described, postgraduate and research settings can be lonely environments, largely due to social and institutional isolation. Meeting peers at programmes and events partly remedied this by instigating new connections that went on to be potential bases for sustained networks:

> 'Another workshop opportunity was another network…it's like a glue that we could expand upon to get a network happening'. (Int2)

As a result of different cohort-based research training programmes, peer linkages were formed and sustained, thereby overcoming the workforce silos in local areas:

> 'We've got a good network here in [city] and that's working across different departments…and I guess they've kind of got formed from [program] and also the [program]'. (Int3)

When a recent PhD graduate was asked about current supports for Indigenous postgraduate students the following was stated, referring to the inter-generational continuity of programmes and small-scale networks thereafter:

> 'I think there's support around. Some of them are still going from when I went through, and so the students that I've got will be going through that same process… I think they [cohort-based programs and courses] were instrumental in creating the cohort and developing just a few relationships. I don't keep in touch with everyone but a few people here and there'. (Int8)

A national-level Indigenous health researcher network was discussed in all interviews, either raised by the interviewee or the interviewer. This was seen as a viable and useful way to protect and extend by combining the sorts of peer network formations achieved thus far. In the following statement, a national network was explored as serving several functions, such as a pooled source of mentors, especially in recognition of shortages of Indigenous supervisors and mentors in higher education and research in many places:

> '…I think we need to have an Indigenous health researchers' network….across Australia you know, I would love to hook into a national body that brings Indigenous health researchers together for an annual conference… not just for collaborative links from an academic and a research point of view, which is important, and know what's going on, but also from a mentoring perspective…we need to do better at this, but there's you know, getting to be relatively good capacity there, and there's a whole bunch of great people doing great things all over the country'. (Int5)

Strengthening further: 'we do it communal rather than individual'

The expanding on peer networks to national level takes us to perhaps the most central feature of peer generative power: group-level work, to bring about change, marked by a transfer of control of health research to Indigenous peoples and communities.

There was more effectiveness when it came to Indigenous peoples merging within a higher education or research institution and gaining momentum together. This point was made by an interviewee reflecting on involvement in Indigenous units:

> '…if get all the mob working together, we can achieve a real lot of good stuff. I've worked in Indigenous units and I just think once you get the flow on there and everyone….and we do it communal rather than individual'. (Int14)

An extra-organisational vantagepoint was provided by one interviewee who stressed an over-emphasis on competition between individuals and institutions in Australian research cultures as a barrier:

> '…I find what happens is there's still a really individualised approach to Indigenous research capacity building and I think that's a real challenge…institutional competitiveness hinders some of that stuff…so I think more needs to be done on how to recultivate a collective capacity building agenda that extends beyond institutions that employ us'. (Int5)

The idea of a national network was brought up as a structure to formulate such agendas and regenerate at the group level. What stood out in such discussions was self-determination, for example:

> 'I'd like to see a stronger collective movement around Indigenous health researcher workforce, and that we're leading that conversation…not non-Indigenous people'. (Int12)

Echoing the interviewee who stressed that 'we need to be nurturing and…looking after each other' (Int5), Interviewee 12 emphasised how Indigenous research assistants (RA) were a large segment of the workforce that needed much more support from their Indigenous peers in terms of realising fair employment, due recognition and advancement pathways that were all neglected or undermined by institutions and funding schemes:

'…the Indigenous RA who typically may not have research experience… may never do a PhD and never become a lead researcher but will work on research for decades. Lots of researchers use this Indigenous RA workforce who are underpaid, who are under-employed often and have insecure employment…we know that workforce is so important to have blackfellas on the ground doing the work – how do we protect that workforce?…it's trying out ways to support them. They don't want to go to uni necessarily, they want to do the work, but we need to do some skill building stuff and get recognition for the skills that they've acquired…'. (Int12)

These next steps require not only those currently located in research institutions but research learning and usage by more Indigenous peoples, especially through better organising of connection between universities and communities. There was joint recognition between peers as being members of both, that they continue to lead the bridging of universities and communities. For one participant, a centre or similar structure that employs peers, and is highly visible to communities, would be helpful to be more effective at this:

'…ultimately there's so much that needs to be done at grassroots level… if they've [communities] got access to the university in a way that is suitable for them, you know we can meet some of those priorities and some of those needs. We won't be able to do it all, but I think that's important work that a community can approach a university or you know, a centre or whatever and say "we need a bit of help in this space", and for that centre to be able to come onboard in some way or another'. (Int10)

Such national-level peer infrastructure could be both comprised with, as well as serve, the next generation of Indigenous researchers in steering the wider research workforce to more wide-ranging and genuine commitments to community-controlled research. The following excerpt from a PhD candidate, reflects the type of envisioning by next generation interviewees:

'…I can see myself working still in research, but maybe in the future maybe close to my community and now that I've had this experience in the mainstream environment, being able to go back and maybe help some capacity development in our communities to actually utilise research and to empower our mob to actually use them as a tool rather than just being participants and being the research, we can take over and take control of some of the agenda items'. (Int2)

This interviewee's sense of generative momentum was also typical and reflective of experiences of being with peers through cohort-based programmes and similar initiatives, and being uplifted by their senior peers shaping research:

'I got the feeling that a lot of people were coming through; there's a next generation of researchers coming and we've got a lot of high-profile researchers that everybody knows about and they had a big impact on their careers. Probably over the next ten years I reckon we're going to see a lot more which is think is a really good thing and a lot of community-based researchers that want to focus on their area which I think is really important'. (Int 2)

Discussion

The contribution of this paper is to foreground the great significance placed by Indigenous researchers on their Indigenous peers—not just in enhanced research learning, upping retention and completion rates and academic success but in (work) life quality, (inter)personal growth, leadership and flourishing. Although peer relations figure in the higher education and research workplace literatures (Meschitti, 2019; Pyhältö et al., 2017), the current findings suggest that the importance of Indigenous peer relations in research capability and workforce strengthening is understated. In addition, although policy at best takes an indirect approach to inter-peer learning and research collaboration, strategic research workforce strengthening should centre on peer leadership that leans to strong collective agency. Broadly, there needs to be direct recognition that Indigenous peers drive the growth and successes of the Indigenous health researcher workforce.

The resonances and forms of comradery between Indigenous peers, and the peer generative power that emerges, is partly from combined social context understandings of seeing power play out, especially the imbalance of power between Indigenous and non-Indigenous peoples. Peer generative power is growing within many research and higher education institutions that were essentially built by and for dominant cultures and to ensure their reproduction (on the historical context of universities, see Smith, 2012; Connell, 2019). Although the significance of peer generative power is in driving change to health research education and research practice cultures, resistance and counteracting minoritising power remains an ongoing collective 'task' and challenge. When it comes to peers, an explicit but also innocuous barrier stemming from domination is the *trivialisation of* peer activities. For example, the health researcher yarning with Elders at a university was questioned on doing this (Appendix A), perhaps implying this person was 'slacking off'. Although Indigenous peoples yarning in a work setting may to some may appear as insignificant and mundane, it is these fundamental ways of doing and being where the peer generative power arises and leads on to impacts on research capability. The concern that what peers do together gets minimised and undervalued echoes sentiments by Indigenous researchers reflecting on their research capability strengthening journeys (Roe et al., 2010). Assumptions that tend to trivialise peer activities need to be strongly challenged. Although likely to not be sufficient on its own, a *perennial reassertion of Indigenous peer work* in 'mainstream' dialogue on higher education, research and the health workforce is a necessary change going forward.

The findings represent further support for the capability strengthening value of research training models, programmes and events that concentrate on cohort building (Elston et al., 2013; see also Ewen et al., 2019b, pp. 8–11). In addition, national Indigenous-led organisations and networks were described by interviewees as essential to meeting and building long-term relationships with fellow Indigenous researchers and communities. These structures that have been established in most cases by Indigenous peoples over the last 20 years, in a sense actualise 'being and doing' capabilities (Sen, 1999; Nussbaum, 2011; Yap and Yu, 2016). For instance, they nurtured the conditions for peer-centric research education that 'allowed you just to be' (Int13) and social environments where 'I can just *do* my work and…*be* judged on my work' (emphases added). Overall, the research capability strengthening approach of connecting Indigenous peoples, many of who have never met, followed by co-learning of health research, has been successful broadly.

In research workforce planning and strengthening, peer generative power has integrative potential. The siloed character of health and researcher workforces and higher education is well acknowledged, and not helped by policy fragmentation (Ewen et al., 2019a, 2019b). Peer generative power provides robust bases of support across tracts of education and health workforce

employment, and throughout the diversity of trajectories of Indigenous health researchers. Moreover, as Indigenous health researchers bring to higher education and research spaces their expertise and experience in community-grounded health care, peers generate synthesis of the health research and healthcare sectors of the workforce.

The current findings are consistent with other studies that reveal the importance placed by people doing higher research degrees and research employed on peer support. The international research education literature on minoritised populations has described how researchers, both emerging and established, find their peers make a great difference such as in navigating typically alienating settings (Elg and Jonnergard, 2003; Esposito *et al.*, 2017). A distinctive meaning of 'peer' here is not a gathering 'of randoms', but a shared historical experience and recognition of marginalisation. The findings also reconfirm stories regarding research and education workplaces regarding racism in Australia (Gunstone, 2009), as well as that new collaborations and greater recognition of Indigenous cultures and knowledges is underway (Asmar and Page, 2018).

Although there has clearly been an upscaling of Indigenous researcher and community meetings concentrated on health research (see Ewen *et al.*, 2019*b*, pp. 24–25), it was clear that the interviewees wanted to see more regularity and sustaining of meeting with peers. This regularity needs to be ensured and invested in strategically. Solitary Indigenous researchers and those working in non-majority Indigenous workplaces may particularly benefit from regular meeting with peers. This point cannot be emphasised enough when it is recalled that: the majority of universities in Australia are only at the early stages of committing robustly to nurturing of Indigenous researchers (Behrendt *et al.*, 2012); cohort-focused research training (e.g. Elston *et al.*, 2013) has not been expanded to the majority of research and higher education institutions; several cohort-based programmes have ceased with the end of funding; and, investment in community-research institution partnerships is highly uneven. Although challenges remain, there is clearly forward momentum, as indicated by the formation of a national level Indigenous-led health researcher network established through the South Australian Academic Health Science and Translation Centre (O'Donnell *et al.*, 2019); the unprecedented over 550 Indigenous-majority attendance to the *International Lowitja Health and Wellbeing Conference*; attendance of 54 postgraduate Indigenous peers at the *2018 National Indigenous Research Knowledges Network Research Capacity Building Workshops* (NIRAKN, 2018, p. 13); The Lowitja Institute (2020) seed funding of Aboriginal and Torres Strait Islander Organisational research; establishment of the Torres Strait Islander Researcher Community of Practice Model (Cheer *et al.*, 2020); and, launch of the collective-focused *Inala Manifesto* (Sweet and McInerney, 2019). At the same time, peer-aware training systems remain a focus for development of the next generation of research education approaches, and programme architects may learn from the outcomes of earlier project implementations. For instance, in the USA there are research education programmes by and/or for marginalised research learners with the objective of establishing peer support structures (Yager *et al.*, 2007), such as formal mentoring whereby more experienced peers mentor a peer in health research (Moore *et al.*, 2017).

There are many sites where peer-led change is needed for strengthening and (re)generation of the health research workforce, for instance—embedding Indigenous knowledges, philosophies and methodologies across the academies; pressuring employers to provide more opportunities for health practitioners to build research into their work, advocating for RA to gain fair contracts, recognition of qualifications and accomplishments and career planning support; cross-sector galvanisation to effect higher streaming from early schooling to tertiary level graduation and entry into higher research degrees and, building on extensive successes in fostering community–university partnerships. In light of the findings, these pathways could do with more concentration in policy and application on peer leadership and communal capability strengthening.

Peer relationships are rarely contended as a priority in research capability strengthening and workforce planning and action. We suggest a reconsideration of the place of peers especially in their collective striving—entrenching peer generative power and leadership in securing and propagating the success of the health research workforce. To restate suggested pathways emanating from this interview study and the larger project: 'Strategic planning at a national level should invest in Aboriginal and Torres Strait Islander researchers working to change institutional structures [utilizing the complexity and diversity of approaches to nurturing research excellence]. Collective agency is integral to research workforce extension and improving the quality and health efficacy of research', and should include 'renewed commitment to cohort-driven research capability strengthening by research funding bodies' (Ewen *et al.*, 2019*b*, p. 9). Notwithstanding the importance of research and reflection on fruitful collaborations between Indigenous and non-Indigenous researchers (McLennan and Woods, 2018), the policy suggestions need to be informed by research devoted to further understanding peer generative power and valuing Indigenous peer exclusive spaces, and ways to further harness peer work. An example would be the recently completed research study in Queensland on peer researcher recruitment, training and retention (First 1000 Days Australia, 2020).

A major limitation of the current research was that this account of Indigenous peers is incomplete, having focused most on experiences within institutions that prioritise research, especially universities. Research learning arrangements such as professional development modules that may be provided by health professional associations and within the Aboriginal Community Controlled Organisations were neglected in the study and wider project. Also, we did not look at Indigenous peoples employed in health research in the private sector or who employ researchers. As far as we are aware, it is unknown the number of Indigenous people working in the private sector in health research, who employ peers as researchers and who are self-employed (e.g. health research consultancy).

Conclusion

Peer generative power is integral to Indigenous peoples' change-making local and international health research and education and research institutions. It is in peer-led endeavours, from the immediate day-to-day to macro policy, that matter to research capability and workforce strengthening, wherein 'it is the community-led innovations, the relationships you nurture in research with our mob in your cohort and the ideas from strong and resilient people where you get to see the magic happen' (Ryan, 2018).

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Appendix A: Interview quotes about workplace conditions and higher education environments

Condition and behaviour	Quote
Implicit racism	'If I'm brutally honest…I think that there is like an unconscious bias still about Aboriginal people as you know legitimate researchers in their own right'. (Int3)
Non-Indigenous researcher resistance	'I think university is being in the space, there's still people who think that they're Aboriginal experts…so this is what I've seen, the blackfellas that are coming through now, there's this struggle with the white people giving up the reigns…there's certain people that will get that we're coming through and they've got to give up that role, but there's people that will hang onto it and still want to do research on us about us but for them, you know'. (Int11)
Lack of support coupled with taken for granted research labour	'I think [Indigenous student group] is really important, but it has taken a huge amount of time. I think it would be really helpful to have some more administrative support because there's just always so much work to do and stuff to organise…I get asked to go to meetings and stuff and then people ask me to do stuff in meetings, and I have to remind them that I'm not a paid member of staff'. (Int9)
	'It's so essential for institutions to support their Indigenous staff because you can't do it all, and I can't be everywhere all of the time'. (Int5)
Responding to constant advice-seeking, eating up time for research	'…you do get a lot of people coming to you because you are Aboriginal person…they'll come to you to try to get advice'. (Int 2)
Short-changing shared practices	'…you go and talk to the Elders, then people start saying "Oh, why are you sitting around yarning with people?"' (Int15)

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