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3 **An evaluation of early career academic nurses' perceptions of a support program designed**  
4 **to build career-resilience**  
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8 **Abstract**  
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11 Early career academic nurses can struggle to meet the demands of career development due to feelings of being  
12 overwhelmed. Studies indicate that programs targeting these challenges are often sporadic and inconsistent,  
13 leading to dissatisfaction and missed opportunities.  
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17 This paper reports on findings evaluating a program designed to build career-resilience in a group of early  
18 career academic nurses who, through the provision of a structured program of support, were enabled to  
19 succeed and thrive in the academy. This six session program was informed by Knowles' adult learning theory,  
20 Mezirow's transformational learning theory and Lord's reliance on critical transactions.  
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26 This study was undertaken in a large metropolitan university in Sydney, Australia. Participants included nine  
27 early career academic nurses. All had been full-time academics from one to six years.  
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30 A qualitative descriptive design was employed using Braun and Clarke's six stage process for data analyses.  
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32 Three themes emerged: the program *fostered connections, strengthened expertise and clarified directions*. This  
33 analysis provided deep insights into the value of collegial relationships to galvanise career success. The  
34 program's strength was its ability to lessen participants' feelings of isolation and to develop behaviours that  
35 enhance career-resilience.  
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40 Key words: Career-resilience program; Early career nurses; Nursing faculty; Qualitative evaluation.  
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62 **1. Introduction**  
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64 In the last ten years, universities globally have been faced with rapidly changing environments (Choudaha and  
65 van Rest, 2018) with many academics in Australian universities experiencing a steep rise in workload  
66 expectations and a market-driven approach to accountability (McKay and Monk, 2017). This is particularly  
67 challenging for early career academic nurses who often transition from a clinical environment and can find  
68 navigating a career in academia challenging (Wyllie et al., 2019). Having access to supports during the initial  
69 years of an academic career can have a lasting influence on success (Hollywood et al., 2019). Universities have  
70 implemented a range of strategies to support academic success with some focusing on developing research  
71 confidence with '*a track record*' in research (Browning et al., 2014). Others have targeted relationship building  
72 within a caring scholarly community (Cox, 2013) and personal resilience (McDonald et al., 2012). Mentorship  
73 programs have also proven to be effective, (Nowell et al., 2017) however a shortage of appropriate mentors  
74 can be problematic (Norton and Cherastidtham, 2018). These peer relationships also rely on the mentor having  
75 an adequate understanding of the workplace context, opportunities, support mechanisms available and  
76 mentee awareness of developmental career expectations (Jackson et al., 2015).  
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89 Current studies indicate that decreasing academic isolation and promoting a shared organisational and  
90 academic responsibility for development, are both vital for supporting career success (Sutherland, 2019).  
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94 **2. Background**  
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97 Career resilience is the ability to adjust and adapt to the changes required for career construction (Lengelle et  
98 al., 2017). Developing academic career resilience needs a clear understanding of career realities and a  
99 disposition that has the capacity to be '*adaptive, nimble, employable, protean and resilient*' (Mishra and  
100 McDonald, 2017) in the academic environment. Literature suggests that ECANs are a particularly vulnerable  
101 group when it comes to career development, often required to take on high teaching loads at the expense of  
102 research careers (Jackson et al., 2015). Nurses have traditionally followed a clinical pathway (Jackson et al.,  
103 2015) and as the majority are female, many experience family disruptions to their career (Sutherland, 2017) so,  
104 they mostly enter full-time academic employment later in life, with consequences for their career trajectory  
105 and success. ECANs are prone to experience a lack of role clarity (Halcomb et al., 2016), a lack of confidence,  
106 feelings of uncertainty and of isolation (McDermid et al., 2016). These can hamper their career development,  
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119 productivity and positive self-regard, ultimately impacting on their health, wellbeing and family life (Torp et al.,  
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121 2018). If a lack of support is added to the mix, *'disengagement and burnout'* can result (Crome et al., 2019).  
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124  
125 As future academic leaders ECANs benefit from careful career nurturing (Halcomb et al., 2016). Much of the  
126  
127 early literature on career support has focused on individual needs. Recent literature has recognised the vital  
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129 part that colleagues play in nurturing developing academics (Browning et al., 2014). Collegial support impacts  
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131 favourably on informal learning (Miller et al., 2017), job satisfaction (Lee et al., 2017) role confidence (Crome et  
132  
133 al., 2019), and academic progress (Sutherland, 2019). The timeliness of such assistance and the need for a clear  
134  
135 understanding of the meaning of academic *'success'* (Sutherland, 2017), are also important long-term. Recent  
136  
137 studies emphasising the importance of early engagement within the academic setting (Crome et al., 2019),  
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139 have been welcomed as a means of generating opportunities and contributing to new employee's wellbeing  
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141 (Hollywood et al., 2019).  
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144 People are at the centre of leadership efforts. Those who aspire to leadership positions need exposure to like-  
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146 minded colleagues in order to gain expertise. Creative, supportive and positive learning environments are  
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148 essential. Mentorship programs benefit ECANs by building relationships and enhancing the confidence needed  
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150 for career development (Jackson et al., 2015). Although ECANs are expected to be proactive, committed to  
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152 continuous learning and able to forge a work-life balance (Mishra and McDonald, 2017) , universities also need  
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154 to provide meaningful and structured support for ECANs to be more proactive and resilient. Career-resilient  
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156 academics are more likely to become dedicated to continuous learning, academic growth and having a well-  
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158 rounded career life balance (Mishra and McDonald, 2017) – ready to keep pace with changing requirements for  
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160 career progression. This study explored the effectiveness of a structured program designed to support ECANs  
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162 to become career-resilient.

### 163 **2.1 Program for Early Career Academic Nurses (PECAN)**

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166 The Program for Early Career Academic Nurses (PECAN) was developed to address issues of isolation and  
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168 promote a shared organisational and academic responsibility for the career-minded academic nurse. It  
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170 consisted of face-to-face fortnightly group *'collaboratories'* (Figure 1) given over three months and targeting,  
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172 everyday issues known to challenge ECAN career development. The sessions were supported by a 72-page  
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174 learning guide that included self-directed, pre- and post-program reflective exercises. Participants were  
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180 encouraged to reflect on what Kaufman (1977) refers to as 'gaps' not 'wants' and to search for their own  
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182 solutions to emergent issues.  
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## 184 **2.2 Pedagogical framework**

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187 PECAN drew on the adult learning theories of (Knowles, 1978) and the theory of transformational learning  
188 (Mezirow, 1991). It offered ECANs opportunities to '*make their own interpretations rather than act on the*  
189 *purposes, beliefs, judgements, and feelings of others*' (Nowell and Foster-Fishman, 2011 p.194) and to  
190  
191 challenge their '*habits of mind*' (Mezirow, 1997). According to Knowles, if adults are to be active learners, they  
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193 need involvement in their own learning, opportunities to critically reflect on assumptions, and the ability to  
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195 personalise benefits. Importantly, the learner needs to take the initiative to identify their needs, create goals,  
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197 select appropriate strategies and evaluate their learning or progress.  
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## 200 **2.3 Collaboratory, collegiality and collaborative learning**

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202 Collaboratories are described by Bos et al. (2007) as '*a creative space without walls*' and where like-minded  
203  
204 adults get together and solve complex problems (Muff, 2017). It was anticipated that by using the space for  
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206 critical transactions (Lord, 1994), ECANs would better scrutinise their performance and develop strategies for  
207  
208 success. Collaboratories are usually associated with a positive affect regardless of whether for fun or a more  
209  
210 serious activity (Bos et al., 2007) and where Kelly and Barsade (2001) state '*combinatorial process occurs as*  
211 *individual-level affective experiences are shared, and therefore spread, among other group members*' (p.106).  
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216 Meetings were private, aesthetically pleasing and comfortable experiences to create a warm and welcoming  
217  
218 atmosphere, conducive to collaborative learning. Lunch was provided to facilitate social cohesiveness and to  
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220 ease participants out of their busy morning and into group workings including an informal presentation by  
221  
222 guest academics. Building trust to allow for collective learning was addressed by observing the programs'  
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224 objectives, inviting authentic guest speakers and setting '*house rules*', e.g. sharing of information during  
225  
226 sessions was an individual decision.  
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## 228 **3. Study aims and research questions**

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231 This study is part of a three-phase project exploring the three year journey of a group of ECANs. Findings from  
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233 Phase one, where ECAN's explored experiences with respect to their career journey (Wyllie et al., 2019), were  
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239 used to inform the programs development and phase three studied the '*dispositions in learning*' or '*habits of*  
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241 *mind*' employed by ECANs to strengthen and sustain their career identity. The aim of this phase was to  
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243 implement and evaluate ECAN's perceptions of PECAN.  
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246 Research questions included:  
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- 248 • What are the ECAN's experiences of the program as a mechanism for supporting career development?
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- 250 • How do ECANs describe their experiences of being part of a learner support group?
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## 252 253 **4. Methods**

### 254 255 **4.1. Design and setting**

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258 The qualitative design featured three sets of data collection over a period of approximately six months. A field  
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260 journal collected two sets of data. Set one comprised observational journal notes taken during the  
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262 collaboratories. The notes taken were used as prompts and probes during interviews and to capture examples  
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264 of critical collegial interactions. Set two were reflective journal entries taken a week following each  
265  
266 collaboratory. The journal notes and reflections were undertaken by the principal researcher and later  
267  
268 discussed by all researchers. Set three involved individual semi-structured interviews. The setting was a large  
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270 metropolitan university in Sydney, Australia.  
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### 272 273 **4.2. Participant recruitment**

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275 Purposive sampling was undertaken from designated ECANs. The inclusion criteria thus required participants to  
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277 be:

- 278 • employed in an ongoing full-time position;
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- 280 • within seven years of commencing an academic role (allowing for career disruptions); and
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- 282 • at least one year into (demonstrates completion of stage one candidature), or having completed a
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- 284 doctorate.
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289 Of the eleven participants in phase one, nine completed PECAN. Reasons for the decrease were because two  
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291 had left full time employment and no longer met the criteria.  
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298 **4.3 Ethical considerations**  
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301 University Human Research Ethics Committee (ETH16-0948) approval was received. Given the study design,  
302 participant anonymity could not be maintained. Pseudonyms were therefore used to ensure confidentiality of  
303 participants in reporting findings. Careful attention was taken to de-identify quotes and any recognisable  
304 comments. Confidentiality was also agreed to by all participants, with reminders given at each collaboratory.  
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306 All data was stored on a password protected drive on the principal researcher's computer only accessible to  
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310 this individual.  
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313 **4.4 Data collection**  
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315 Semi-structured face-to-face interviews, including one via Skype, were undertaken approximately six months  
316 following the last collaboratory. This was believed to be a suitable period to allow for any impact.  
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319 Privacy and comfort were important to capture nuanced accounts of experiences and perspectives about  
320 structure, organisation and transfer of learning. Interviews were audio-taped and conducted by the principal  
321 researcher. The interview included open-ended questions (Figure 2). Probes and prompts were used to capture  
322 rich data (Bryman, 2016). The interviews lasted between one and one and a half hours. Recordings were  
323 professionally transcribed and verified by the principal researcher and participants.  
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330 **4.5 Data Analysis**  
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332 Interview transcripts were thematically analysed using the six-stage process of Braun and Clarke (2006).  
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334 Transcripts were read multiple times by the principal researcher to facilitate data immersion, while notes were  
335 taken in margins in order to form initial ideas. Individual responses to questions were arranged systematically  
336 on a spreadsheet with a separate cell for each response. Data were coded to match the individual participant  
337 and new codes recorded as they were identified. Codes were arranged into subthemes and potential  
338 overarching themes. Significance awarded to codes that reflected the research questions and those frequently  
339 cited (Bryman, 2016). A thematic map was created to illustrate the connecting subthemes and three major  
340 themes. Substantial time was given by the researchers to review the coding before major themes were  
341 finalised. Analytical summaries including key quotes to support themes were created.  
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350 **4.6 Rigour**  
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357 Credibility was established using an iterative process during data analysis with increasing data immersion and  
358 familiarity (Sandelowski and Leeman, 2012). All participants received copies of their own researcher reviewed  
359 transcripts to confirm accuracy and authenticity of data (Carlson, 2010). Confirmability was assured by using  
360 the reflective journal entries of emerging themes during regular discussions with co-researchers. Dependability  
361 was reflected in a detailed audit trail of the analysis stages (Koch, 1994).  
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## 366 367 **5. Findings**

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369 All nine ECANs participated in interviews. Their ages ranged from 30 to 55 years (mean of 41 years) and all but  
370 one were female. Length of academic employment was one to six years. Seven of the nine had held clinical  
371 positions prior to commencing at the university and two had held academic positions at other universities.  
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377 Three key themes emerged from the data analysis and each provided insights into the participants' experiences  
378 of being part of the PECAN and how it supported them to become more resilient by: *fostering connections*,  
379 *strengthening expertise and clarifying directions*. Direct quotes were mostly taken from the audio-taped  
380 interviews and supplemented by collaboratory interactions.  
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### 385 **5.1 Fostered connections**

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387 Collectively, participants felt that they were expected to independently and effectively make the connections  
388 with experienced academics to support their development. Their realities however, had been different, and as  
389 Terry stated during interview, '*we get siloed and isolated by deadlines and all the rest of it*' which can limit  
390 getting '*to know or work*' with colleagues. This sentiment was echoed by others who talked about '*working in*  
391 *isolation*' and '*if you are isolated from a work point of view, like relationships and research, it is not assisting*  
392 *your career*'. Adrian even went as far as to call working in isolation '*dangerous ... like people can get depressed*'  
393 adding that:  
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402 *'Most academics are analytic ... they are not relaters by nature so it is hard and they may not be*  
403 *comfortable with approaching people ... it is a skill so if they are not aware of that from the beginning*  
404 *it can be highly detrimental going forward and I don't think that we prepare new academics for that'*  
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407 [Adrian].  
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414 Collegial goodwill assisted participants to take up opportunities; but mixing in the collaboratories offered a  
415  
416 stronger sense of connectedness. One said, *'I came in the beginning to support a colleague, but it was no chore*  
417  
418 *... I made contacts that I did not expect'* [Alex]. Participants had come to realise they had been *'missing that*  
419  
420 *collegiality so that is why I think this program [PECAN] worked well ... it was organic, it wasn't imposed'* [Drew].  
421  
422 The sessions provided a supportive environment where they could, *'cultivate an identity'* with Jamie adding  
423  
424 *'there is only so much planning that you can do on your own'*. For many participants, their doctoral studies had  
425  
426 prepared them for research but *'in no way does it prepare you on how to become that academic'* [Dale].  
427  
428 Although some were beginning to build careers, they realised that they couldn't be productive on their own.  
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430 This was emphasised by Jamie who said that the PECAN *'had been a really important learning curve for me*  
431  
432 *developing as an individual and taking part in others' development'*.  
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435  
436 The mentorship session tested the ECANs views about a mentee's role. Three of the nine believed they  
437  
438 understood the role. Finley queried what *'understood'* meant. Andy explained it as having courage. She  
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440 described how at an overseas conference, she had asked one of the guest speakers to be a mentor, and  
441  
442 remained in contact with *'this wonderful person'* regarding *'obtaining competitive research grants'*. Jamie  
443  
444 thought it important for the mentee to drive the relationship and targeting mentors for your needs. For Adrian  
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446 choosing two mentors had given a different perspective on career aspirations and confidence to be *'flexible*  
447  
448 *and adaptable to change'*. Participants were also asked to expand on mentorship needs during interviews. Alex  
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450 who was on *'the look out'* for a mentor better understood her role and realised that *'[...] would make an unreal*  
451  
452 *mentor and would follow-up'*. She added that the group was *'coming off a low base'* and *'applauded the*  
453  
454 *program in taking a more practical approach to mentorship by teaching us how to be a mentee'*. Others noted  
455  
456 at interview that the *'right'* mentor had to be *'trustworthy'*, someone to *'admire'*, *'important that they are*  
457  
458 *going down the same pathway'* and as Jamie commented, a *'good fit ... it doesn't have to be someone in the*  
459  
460 *faculty'*.

461 Collaboratory sessions were described by Terry as *'intimate ... with varying level of voices'*: a *'safe space'* where  
462  
463 they could *'be themselves'* and as Drew added *'develop a bit more empathy for each other ... and be kinder to*  
464  
465 *[one]self'*. Finley attributed these feelings to the *'relaxed calm environment'* which encouraged *'trust'* and  
466  
467 *'open[ness]'*. Being away from the busyness of the workplace, participants could unwind, focus on group  
468  
469 workings and network: skills that some found difficult *'... networking is one of the most challenging parts of*  
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475 *being an academic but one that you have to be able to do'* [Chris]. All agreed about its career value and for Alex  
476  
477 and Andy was the main reason they volunteered to participate. The openness also fostered relationships  
478  
479 following the PECAN, and as Alex stated at the completion of her interview, *'You feel like you've got someone*  
480  
481 *you could talk to ... even once we finished the program, we still had that connection'*.  
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## 483 **5.2 Strengthened expertise**

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485  
486 A high point noted at participant interviews, had been listening to guest academics *'powerful ... engaging*  
487  
488 *stories'* and being able to mingle and learn from their career trajectories, described by Chris as *'the whole story*  
489  
490 *and the means to get there'*. One summed up the ECANs' feelings about how others had forged an academic  
491  
492 career journey, *'when the title comes off and we see the person ... the struggles and weaknesses and know that*  
493  
494 *they could do it ... then there's hope for me ... I can get there as well'* [Dale].  
495

496  
497 Being further along in their careers, meant that guest academics brought authenticity and an understanding of  
498  
499 what *'worked'*. Terry said their input *'laid bare the hidden knowledge ... that we need, to better under[stand]*  
500  
501 *our career'*. Drew stated that because she *'recognised [her] own experience'* in some of the stories, she felt  
502  
503 *'comfortable, more in tune with taking part in the discussions and that the program had her interests at heart'*.  
504  
505 Andy was more specific about her experience, using the terms *'work-as-done'* (WAD) rather than *'work-as-*  
506  
507 *imagined'* (WAI) to describe why the program had been effective in facilitating her growth and development.  
508  
509 She explained that the terms WAD and WAI are used in healthcare literature to discuss the way people think  
510  
511 about work and how best to pursue a safe and successful path (Hollnagel, 2017). Andy's view was that the  
512  
513 guest academics had shared work that had been experienced or achieved, rather than what was *'thought to be*  
514  
515 *needed'*. Using Andy's example at other interviews brought consensus that learning from those who had  
516  
517 experience *'was a powerful teacher'*.

518  
519 The reflective exercises highlighted career development gaps. Jamie at interview said it offered opportunities  
520  
521 to *'compare a set of norms ... with like-minded people'* about *'meaningful self-development'*. Maximising  
522  
523 opportunities to benchmark came as the result of a *'congenial social setting'* [Terry] and the findings indicated  
524  
525 that as collegiality thrived so did the dialogue; so that it was *'okay to open up and find solutions to those every-*  
526  
527 *day issues'*. Drew stated, [the laboratories] ... *'was protected time ... a nice little bubble ... almost*  
528  
529 *impenetrable from external pressures ... where a real conversation could be had'*. Alex described the experience  
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534 in this way: *'we learn to be protective about our work in progress but coming here I found a critical voice ... one I*  
535 *could use with myself and others'*. Another participant found that group support gave them the ability to  
536 *'actually put my view out there with confidence ... give advice to others'* [Chris]. Yet another suggested that *'...*   
537 *just getting into a room with like-minded colleagues who have had the same experiences and making*  
540 *adjustments to my plans was helpful'* [Finley].

### 5.3 Clarified directions

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547 It became apparent that the group had been mulling over career directions for some time and program  
548 activities and exercises had triggered critical reflections on their situations. Such conversations were usually  
549 carried out with workload supervisors but feedback was that this system had mixed results and on reflection  
550 they had found it *'useful'* to reveal their *'hopes'* in a *'small group of like-minded people'* where guest academics  
551 added a reality to future direction. As trust built, participants sought more direction. Here Lord's approach of  
552 *'challenging interactions'* was observed. During a discussion on *future directions* Drew used a metaphor to  
553 describe how she felt, *'I am in some boat and rowing in my own way but the boat just going round in circles'*.  
554 Drew was challenged by the guest speaker to think more deeply about responsibility for her career and asked  
555 to reflect on *'how'* she planned to change this pattern of behaviour, sparking a lengthy participant interchange  
556 about who held responsibility for future directions. Most felt the need for dual faculty and ECAN responsibility  
557 focusing on *'the realities of a career'*.

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569 With a competitive global environment, including increasing competition for grant funding, participants  
570 recognised the need to be flexible, adaptive and *'get out there and get known'*. One adaptation that sparked a  
571 lively challenging conversation was sharing views on social media. There was consensus that social media was  
572 *'unescapable'*. Several found it *'daunting'*. For Andy, it presented quite a problem as she was floundering in  
573 *'knowing what to do with networking on social media ... once your comment is there all can view [Andy]'*. She  
574 was quizzed about her social media practices. Advice from Drew and Chris included, to: *'limit looking over other*  
575 *people's posts without sharing anything about yourself'*, *'attending large conferences are great for laying a*  
576 *social media platform'* and *'focus on the message ... not feelings'*. Several at interview welcomed the guidance  
577 and now approached social interaction in a different way.

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592  
593 One participant had just completed a doctorate and found the PECAN timely, stating that '*more than anything*  
594 *else [working with the group] gave me confidence to ... rethink my next steps*' [Jamie]. Involvement also  
595 provided major directional changes for Alex, announcing that the program had '*made [her] think very hard*  
596 *about my role and future*'. She told the group how she was struggling and until '*I actually came here I was going*  
597 *to leave the job*'. She later explained that the experience had '*opened her eyes*' and she made some changes to  
600 her development plan and found that the change of direction better fitted her needs.  
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605 Participants had different views about their future plans and how the PECAN had impacted them. Prior to their  
606 academic employment, many had been in positions of authority. Later asked about this, Alex stated '*there's*  
607 *this underlying assumption that everybody who comes in [to the university] wants to move up ... I just want to*  
608 *do effective research*'. Others, especially those who were confident that research would be their future path,  
609 found the '*research skills roadmap*' session essential to understanding the skills required and '*it pinpointed who*  
610 *I now need to ask about such skills*'. Another said, '*I just got a new grant ... the group discussions boosted my*  
611 *confidence about my forthcoming project*' [Terry]. Change was also on Andy's radar as she described how she  
612 had '*been thinking about making a commitment and will now go for senior lecturer sooner, as I realise I feel*  
613 *comfortable with my development*'. This was from someone who had previously stated that she was unsure  
614 about applying for promotion as she felt insecure about deserving promotion and that her colleagues might  
615 think ... '*who does she think she is ... she hasn't been here long enough*'. Adrian, also contemplating promotion,  
616 added it was about '*just having the acknowledgement from someone else that you are not the only one setting*  
617 *your sights made a difference*'.  
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## 630 **6. Discussion**

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633 This study explored participants' overall perceptions of a support program designed to build career-resilience  
634 and its impact on their career development. Discussions involving ECAN's development and future career plans  
635 are usually carried out during local appraisals by workload supervisors, however most of the participants found  
636 this process to be a lonely one due to '*deadlines and all the rest of it*'. They welcomed the autonomy and  
637 challenges of determining personal plans but believed that crafting of plans needed more discussion with and  
638 practical guidance from colleagues. Previous studies agree that when isolation is not a matter of choice, it can  
639 have a major detrimental impact on early career academics development (Ponjuan et al., 2011). Isolation can  
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652 lead to loneliness and a decline in health and wellbeing (Belkhir et al., 2019); particularly mental health  
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654 (Kinman, 2016). Participants found mentors and colleagues to be effective in reducing their loneliness, but not  
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656 all ECANs were lucky enough to have obtained a mentor, with goodwill from colleagues serendipitous. They felt  
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658 that the PECAN collaboratories filled a niche in lessening the feelings of isolation, providing a collegial  
659  
660 environment where the ECANs could connect.

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662 Creating group cohesiveness is important for accomplishing positive work environments and commitment.  
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664 Positive and productive environments don't just happen, they need to be created (Oades et al., 2011). The  
665  
666 program created positivity and as suggested by Iqbal et al. (2016), for cohesiveness to occur, participants must  
667  
668 recognise the '*inherent value of groups and the functions they fulfil for members*' (p.8). The learning guide  
669  
670 provided, was a resource that allowed for career development and reflection so that when the group came  
671  
672 together they were able to concentrate on actual needs and work toward the career aspirations that had  
673  
674 brought them into the higher education sector. Sharing was particularly evident and appreciated in the  
675  
676 collaboratories, as it brought an authentic perspective, especially the involvement by guest academics who, by  
677  
678 talking more about their own personal goals, invited the ECANs to appreciate the career to which they aspired.  
679  
680 The sessions allowed participants to think more broadly about their careers and for those on the cusp of  
681  
682 important commitments, make modifications and hasten their progress.

683  
684 One of the strengths of the PECAN's pedagogical design was using Lord's system of '*challenging interactions*'  
685  
686 during the collaboratories. This formal but relaxed group allowed for academics with differing levels of  
687  
688 expertise to mingle openly, with critical discussions encouraging them as to describe more thoroughly and  
689  
690 think more deeply, on how they tackled challenges, took risks and worked toward being an academic in a  
691  
692 global community. Participants commiserated and celebrated experiences involving identity building, values  
693  
694 clarification and career hopes, as one said in a more, '*organic*' manner. Colleagues were able to give advice and  
695  
696 confidence about social media strategies. This approach has worked in other settings where challenging  
697  
698 interactions within a community of professionals changed learning behaviours and enhanced professional  
699  
700 development (Males et al., 2010). Journal notes indicated that at first the participants had been tentative in  
701  
702 offering advice but began to '*probe*' and '*test*' each other's views as relationships became more trusting and  
703  
704 the group more cohesive, the language turned from agreeing, to 'but had you thought about ... or, 'if you do it  
705  
706 this way ... '. According to Lord (1994) it is this concentration on challenging group dialogue that gives way to  
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710  
711 deeper thought and is the catalyst for what he has called '*critical collegueship*'. An approach that research has  
712  
713 shown enhances professional development.

714  
715  
716 Providing opportunities for transferring of knowledge and upskilling ECANs to cope with the demands of career  
717  
718 development requires appropriate content within a conducive environment, while working to strengthen  
719  
720 attitudes. The collaboratories show a group of ECANs who were grappling with direction. The program  
721  
722 supported the participants becoming more discerning and responding quickly to new ideas, responsibilities,  
723  
724 expectations, trends, strategies and other processes at work. This in turn helped them see bigger picture goals  
725  
726 and acquire attitudes such as effective people skills, continuous learning, self-confidence, and a willingness to  
727  
728 take risks. All of which are valued by employers (Mishra and McDonald, 2017).

729  
730 Programs all have costs requiring expenditures for their continued operation. The cost of implementation of  
731  
732 PECAN was primarily associated with energy, time and a champion. The ECANs in the study were eager to  
733  
734 belong to a group where they could connect with like-minded peers and with the shortage of experienced  
735  
736 mentors, such connections could maximise resources and offer benefit to both ECANs and faculty. Although  
737  
738 implementation and upkeep of the program would incur some ongoing costs it would also have the potential to  
739  
740 generate savings. One promising potential cost offset is reducing recruitment costs by increasing staff  
741  
742 retention.

### 743 744 ***Implications and recommendations***

745  
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747  
748 With the international shortage of ECANS, the importance of strategies to retain and support these novice but  
749  
750 highly valued staff members cannot be overstated. This study has demonstrated that a structured and  
751  
752 meaningful program can promote collegiality and support career engagement. Further, ECANs who are  
753  
754 introduced to the uniqueness of the corporate university and who understand the expectations of them as  
755  
756 career academics are more likely to succeed and progress.

757  
758 The key recommendation from this study relates to the importance of supportive workplace environments with  
759  
760 regular small group informal mentoring sessions to develop camaraderie and to enhance ECAN's career  
761  
762 resilience.

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769  
770 **7. Limitations**  
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773 This study of ECANs limits generalisation of the findings to other disciplines. As this study used purposive  
774 sampling, the findings may not be representative of other ECANs and in different university settings.  
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777  
778 **8. Conclusions**  
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780  
781 Preparing nursing academics for a career in an increasingly complex environment involves personal  
782 responsibility with both institutional and individual input. Universities therefore need to provide opportunities  
783 for ECANs to engage with a variety of support mechanisms to progress their careers. This study has shown that  
784 given a supportive environment, using small groups of like-minded academics can be powerful and can  
785 engender resilience. Being resilient empowers ECANs to manage career obstacles, make sense of organisational  
786 changes, and manage transition. Resilience is more than ensuring positive outcomes in the development of  
787 discipline and community, it is also about the individual's capacity to remain self engaged. It is suggested that  
788 for continued productivity and career satisfaction, it is important for ECANs to capitalise on early strengthening  
789 of their career identity to sustain the journey.  
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800

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## Figure 2. Semi-Structured Interview Questions

Open-ended questions that asked about participants' thoughts, feelings and experiences of the program and impact of the program on their academic development and career. The journal notes assisted to prompt areas of relevance during the collaboratory sessions.

### A) Introductory

Briefly, tell me about one or two program experiences?

(Warm up questions. Make the person comfortable and get them to 'reconnect' with the program)

### B) Program

Can you tell me what aspects of this program was the most developmentally satisfying/helpful?

What did you feel about the collaboratories?

What did you think about the booklet?

Any surprises about the program?

**Probes and prompts:** Did you feel stimulated? Supported? In what way/s? By whom? Did you continue to use the booklet? How? When?

(Why ask these questions?)

Appropriateness: To what extent does the program address needs identified from the first interview? How well does the program align with ECAN needs?)

### C) Career development

In your view what has been the most helpful to your career development?

**Probes:** Why do think that was? Did anything in the program assist? And, in what way?

Why ask these questions?

To what extent is the program achieving the intended outcomes, in the short, medium and long term?

To what extent is the program producing worthwhile results (outputs, outcomes) and/or meeting each of its objectives?

**Effectiveness** A program that can help to develop the ECAN can assist in the growth and development of the students, organisation, discipline and the faculty.

### D) General

Is there anything else you would like to tell me?

Anything you would have liked included in the program? Changed?

What has been surprising?

<b>Career Management</b>	<b>Module 1 Being Strategic</b>	<b>Module 2 The 'Crafting' of An Academic</b>	<b>Module 3 Fostering Relationships</b>	<b>Module 4 Building Resilience</b>	<b>Module 5 Maximising Influence</b>
<b>Modular Aims</b>	<b>Aim:</b> Exploring the current academic landscape and examine career progression support mechanisms	<b>Aim:</b> Expedite the academic career planning and development processes to enable appropriate goals	<b>Aim:</b> Enhance healthy and effective mutual working relationship with faculty colleagues	<b>Aim:</b> Adopt the elements required to be resilient researcher in an academic environment	<b>Aim:</b> Making plans, and critically collecting evidence for taking a nursing leadership role in academia
<b>Pre-collaboratory Activity Sets designed to focus on developing the ECANs portfolio</b>	Focusing on reviewing the academic landscape and what counts as progression in a career	Exploring needs, what does an academic do & what motivates them	Connecting with colleagues, career relationships and mentorship	Resilience and you	Future plans: Skills that result in development
<b>Collaboratory Face-to-face topical discussions</b>	Navigating Career & self-care: To explore with a group of ECAN colleagues, their career navigation and to what extent a proactive approach can give confidence and so increase performance	Capabilities required: To explore with a group of ECAN colleagues the experiences and capabilities that are shaping a successful ECAN portfolio	A working relationship: Exploring with a group of ECAN colleagues, strategies that establish a productive relationship with your colleagues, including mentors	Resilience in practice: To explore with a group of ECAN colleagues the supports and skills necessary to sustain a research portfolio	Progressing a career: To explore with a group of ECAN colleagues thoughts on career planning, documentation and making the most of opportunities in academia
<b>Post-collaboratory activity sets consolidating modules</b>	Scanning and reflection on the environment	Documenting needs: Exploring expectations and managing progress	Reflecting as a critical tool	Wellbeing and academics	Making plans both short and long term and evidence of development
<b>Post module Recommended resources</b>	Summary: A focus on strategies in the progression of a career	Summary: A focus on the attributes and competencies necessary to flourish as an academic	Summary: A focus on reflection and feedback as sound and effective learning tools	Summary: A focus on wellbeing whilst working in academia	Summary: Portfolio documentation and refining to focus on evidence of leadership

**Figure 1: PECAN Overview: Capacity building early career academic nurses' (ECANs) approach to managing a career**