An Australian case for relational resilience. Building academic pathways in first year, preservice teacher education

Resilience or relational resilience? Building academic pathways in first year, preservice teacher education. An Australian example.

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Abstract

This research explores the potential of pedagogies embedded within an Australian example to allow pre-graduate diploma of education (PSDE) students to persist and succeed in their ambitions. This paper examines how the twin concepts of resilience, the capacity of an individual to withstand difficulties, and relational resilience, a capacity to develop empathy with others, are activated in this PSDE program. Methods include a survey (n=43), documents from the course, and focus group interviews (n=9) of PSDE students between 2014 and 2016. Results support our thesis that relational resilience in teacher education contexts can usefully be viewed as a dynamic and socially constructed phenomenon emerging from the intersection between individual and institutional factors. This research supports the importance of identifying capacities for interpersonal and collaborative work, for entry into preservice teacher education. We suggest that focusing on relational dynamics, as well as accounting for context and institutional culture, are critical in designing effective pre-service education.

Introduction

From 2017, teacher education institutions in Victoria, Australia, are required to select potential teachers on the basis of the characteristic of 'resilience' (Victoria State Government Education and Training 2017). Resilience is not defined in the Government's Discussion Paper but rather is presented as one of a list of individual characteristics that are apparently self-evident in the selection of successful future teachers. This research contributes a perspective on the concepts of resilience and relational resilience gained, from research with students enrolled in a PSDE course, with an emphasis on the students' personal experience. This course operates as a pathway, or bridging course, into the second year of a Bachelor of Education course.

This mixed-methods research investigates three research questions:

1. Is there an association between resilience and demographics and academic outcomes?

2. Is there an association between self-perceived skills, demographics and academic outcomes?

3. To what extent does these students' accounts of their experiences in the course emphasise relational factors rather than individualist traits in building resilience?

The overarching research question guiding this study is 'How do we create an atmosphere of safe discussion, a 'conversational' space, where the social interactions necessary to engage in preservice teacher education can take place?' We believe that this question is fundamental to constructing an environment that can foster relational resilience.

The first part of this paper considers the literature on resilience, relational resilience and the context for the research. We then examine individual resilience, through a critical appraisal of students' self-reporting in an online survey. The purpose of the survey was to clarify how, or whether, this cohort's perceptions of resilience were in any way related to traditional measures of academic success and self-perceived academic skills. The second part of this paper considers how students report their course experiences and, in turn, ways in which this course reflects the concept of relational resilience. We also consider course documents and informal student feedback during course meetings as part of the analysis.

Resilience survey

The resilience survey corresponds to research questions one and two. The survey was piloted in an earlier study of resilience and retention in higher education undertaken by Funston (2011, p.7) and modified with the addition of the resilience item in this study. The analysis in this research is confined to the relationships between the single-item resilience measure, and self-perceived academic skills, while controlling for demographic factors. The eight self-perceived academic skills items asked participants to indicate in a dichotomous response whether they had certain skills relevant to educational success, covering the domains of time management, active listening, confidence in group interaction, ability to build relationships, and source and interpret information, making sense of complex arguments, using computers, and the ability to ask for help. These items were summed for a total score ranging from 0–8.

Kendall's tau-b test was used to test possible associations between resilience and self-perceived academic skills. This is a reliable test in small samples. The tables in appendix one illustrate the limited associations found between the items in research question one and two.

Appendix one contains tables (one and two) to clarify the efficacy in the analysis from the quantitative data and respond to research questions one and two. These detail our quantitative point that assumptions about individual resilience factors are somewhat limited.

Resilience and relational resilience

Resilience is traditionally described as a series of individual characteristics, either directly observable or inferred, that enable an individual to bounce back from adversity and trauma; some individuals are deemed to have relatively good outcomes in response to serious stresses or adversities (Rutter 2012, 335). Masten, Best, and Garmezy (1990) assert that resilience is a moderator to enable, enhance or reduce the effect of adversity and can be a predictor of good outcomes, including successful course completion. Reivich and Shatte (2003) also elaborate on the importance of an individual's ability to reach out to people who care about them during times of need (Rutter 1987; Goldstein and Brooks 2012). Both this educationally-oriented resilience literature, with a self-help focus, and the mainstream literature on resilience, emphasise the importance of reaching out to others, but, often ignores relational dynamics. Relational dynamics, the capacity to move beyond individual responsibility for 'resilience', refers to the relational dynamic processes and interconnections of individuals with their community (Jordan, 2013). This paper argues the emphasis on individual resilience in much of the literature is at the expense of ignoring serious limitations in student agency imposed by social, cultural, institution and economic structures.

Relational resilience can be defined as a culturally constructed concept to make sense of how we go about our work (Edwards 2009, 2010; Edwards and Apostolov 2007). More specifically, relational resilience refers to the 'belief that all psychological growth occurs in relationships' and that resilience resides in the capacity to make connections rather than the individual self (Jordan 2013, p. 73). In this research the relationship connections examined are individual student to the institution as well as the institution (staff and community) to student. Following

from this, relational resilience is only properly understood when viewed holistically. We propose that relational resilience, and how it interacts with the institutional context, is a more appropriate lens to clarify the process elements of students' success, persistence and retention, than focus on the individual characteristics of students. In this way, we view relational resilience as a *process*, as proposed by Mansfield (2016). Building resilience is both a dynamic capacity and outcome of students' interactions with each other, which are influenced by institutional and pedagogical factors.

Edwards and Apostolov (2007) suggest that the idea of resilience be expanded to include a capacity to work with others in order to shape and reshape the conditions of one's development. Resilience is connected with agency and ability to engage and interact with the new institution. Relational resilience is thus a 'social construction' that is influenced by multidimensional factors, unique to the context. In this case, the social situation is a pre-entry teacher education course for students who did not achieve current academic benchmarks for entry into the regular teacher education course.

Resilience. A relational characteristic in preservice teacher education?

Much of the teacher education literature discussing resilience has been focused on the qualities of individuals, predominantly early career teachers (Day and Gu 2013; Mansfield et al. 2012; Beltman, Mansfield, and Price 2011). Growing concerns about high attrition through "burn out" in the first five years of teaching has generated a large and growing body of research looking to identify the key factors that enables the pre-service teachers to 'tough it out' (Le Cornu 2009).

Studies of psychological coping consistently highlight adaptive benefits for those who tend to cope by reaching out to others, often termed an approach coping style, rather than withdrawing (Park & Adler, 2003). Similarly, Jordan emphasises that 'psychological growth occurs in relationships' and that resilience resides in the capacity to make and sustain functional connections with others, rather than viewing resilience through a student focused lens (Jordan 2013, 73). By way of contrast, social constructionists and anthropologists claim that social context is fundamental to the development and maintenance of the self (Shotter 1993; Laing 1972). Similarly, socio-ecological frameworks that examine the social and emotional; process, person and contexts can be useful in showing how particular strategies support or otherwise student success (Bronfenbrenner 1979) The research outlined in the present paper situates itself within this latter tradition. We also clarify how the students in this cohort view themselves qualitatively in terms of the concept of resilience.

Relational resilience in preservice teacher education

Luthar, Cicchetti, and Becker (2000, 554) assert that 'resilience' can be defined as a dynamic 'process or phenomenon of competence' which encompasses 'positive adaptation within the context of significant adversity'. A subcomponent of resilience includes an individuals' capacity to dynamically reframe negative circumstances so as to extract key learning that can be gained from complex life encounters and develop reappraisal capacities altering positive or negative perceptions of events (Folkman and Moskowitz 2000). Edwards and Apostolov (2007) identify the need to move beyond individuals and examine how institutions, in this case the PSDE course, build relational resilience to maximise students' ability to fulfil their goals. This paper proposes relational resilience as it manifests itself in an interdependent relationship

linked to organisational culture and processes that support learners to be successful in higher education settings (Parson 5-7 December 2007). Through the lens of relational resilience, the researchers examine teaching and learning opportunities that equip non-traditional students with the necessary skills needed to transition into a higher education degree pathway. The paper also recognises the importance of 'connectedness' between students, academics and the institution and also how particular factors assist in the establishment of relationships built on trust, respect and good will (Cacciattolo and Gilmore 2016; Carr, Gilmore, and Cacciattolo 2015; Devlin 2011; Devlin et al. 2012).

Relational agency, defined as the 'capacity to ask for and offer support' (Edwards 2005, 168) offers coherence with relational resilience, (Edwards 2010; Edwards and Apostolov 2007). Le Cornu (2009) draws attention to how the preservice teacher experiences in practicum play a relational role in supporting resilience-building through course mutuality, persistence, satisfaction and empowerment. Less attention has been given to how an overall course structure interacts with first-year teacher education students to support success. Our research builds on this recent work and provides explicit examples of relational resilience, where we explore students' experience of an education that emphasises collective identity and belonging as fundamental to the first year university experience.

Mutuality refers to the quality of relationships where students feel connected, are encouraged to persist, even when learning is difficult, gain recognition and satisfaction from their work, and feel engaged with peers, teachers and the broader institution and community (REF). Institutions, and by implication staff, can create opportunities to foster relational agency and relational resilience. In this paper, we explore how the PSDE course structure enables development of relational agency and resilience, as well as support student engagement and persistence. As

Edwards (2005) strongly argues, relational resilience can be built in a non-dependent manner through dynamic and dialectical capacities, through the student and staff interactions.

Judith Jordan's work with the Stone Centre challenged traditional models of individual resilience to view 'resilience as a relational dynamic with capability for connection' (Jordan 1991; Jordan 1997, 2008, 2010; Jordan 2013). Connected relationships foster clarity as well as capacities for further connection. The need for connection and emotional joining are 'served by empathy, which in authentic relatedness, is characterised by mutuality' (Jordan 1997, 21). Mutuality in this research is offered by the educational context, opportunity to join preservice teacher education and the course structure, engagement in classes and a pedagogy that reinforces teaching principles and values.

Le Cornu (2009) offers a model of relational resilience in preservice teachers that includes links to the creation of learning communities as supporting preservice teacher persistence. She elaborates on how these learning communities recognise that learning that is participatory, proactive and collaborative in comparison to more individualistic models of preservice teacher engagement.

This PSDE course tends to attract students who would not traditionally gain entry to the teaching profession and therefore contributes to teacher diversity and provides an opportunity to examine relational resilience from an institutional perspective. Furthermore, an examination of the concept of resilience is timely and provides insight into the institutional frameworks necessary for developing relational resilience.

In summary, relational resilience, including concepts of mutuality, empathy and mutual growth and offers a new way of viewing institutional responses to student characteristics, specifically individualistic resilience constructs. Baker Miller (1997, 28) explicitly discusses the importance of 'growth-fostering' relationships, elaborated as 'five good things' in mutual relationships which create a sense of zest, clarity about

oneself, the other and the relationship, a sense of personal worth, the capacity to be creative and productive, and the desire for more connection (Jordan 2010, 92; Blum, McNeely, and Rinehart 2002) in this transition space to full pre-service teacher status (Carr, Gilmore, and Cacciattolo 2015).

The Australian higher education preservice teacher education context

The traditional qualification for entry into Victorian Australian teacher education is an Australian Tertiary Admission Rank score (ATAR) score. This system ranks students' Year 12 grades into a common percentage score (Victorian Tertiary Admissions Centre 2012). For students who do not meet the ATAR requirements of teacher education programs, their chances of entering into a teaching profession are limited. The introduction of Literacy and Numeracy tests (Victorian Institute of Teaching, 2015) may pose a further barrier teacher education course entry, and also seems contrary to the goals supporting increased diversity of teachers entering into the profession, expressed as critical to culturally diverse teacher graduates (Escayg 2010). International data shows that diversity in teacher populations can lead to improved student progress, motivation and academic outcomes (Cheng and Halpin, 2016; Paine, 1990).

The creation of further barriers to teacher education access, beyond those already imposed by State and Federal professional bodies, appears to conflict with growing evidence that success of non-traditional students at university is related as much to how the institution engages, supports and challenges the student in constructive relationships, as it is to pre-entry selection requirements (Funston 2014; Funston, Gil, and Gilmore 2014; Devlin 2010, 2011; Devlin et al. 2012).

Recent calls by Australian Institute for Teaching and School Leadership (AITSL) (2017) for only the top 30 per cent of school applicants to enter teacher education courses are of serious concern in terms of teacher diversity in our schools and attracting equity groups into teacher education. An increasing focus on teacher entry 'standards' and moral panic regarding the quality of preservice teacher is likely to result in a decline in teacher diversity in our schools. At the same time as this call for focus on entry standards is a focus on individual resilience rather than relational resilience (Brandenburg et al. 2016). As we have noted above individualistic resilience characteristics are somewhat problematic.

The PSDE course

The cohorts of students in the PDSE typically do not meet many teacher education entry requirements (2012-16); are from low socio-economic communities; have English as their second language (ESOL), have failed ATAR by a small margin entry into mainstream higher education courses; or are returning to study for a second career. The pedagogical intentions of the PSDE were informed by the development of Higher Education liberal arts courses elaborated by Carr (2013) and Hallpike (2013, 2014). Essentially, this PSDE was structured to align with 'transition pedagogy' that argues for universities to be specific and holistic in developing courses to scaffold and support entering students (Kift 2011; Kift, Nelson, and Clarke 2010). Like the Liberal Arts course designers, the Arts and Education staff in the PSDE course sought to positively value and tap into the cultural and linguistic diversity of the student cohorts, and to 'find ways to enable non-traditional students to draw on the rich cultural resources, alternative knowledge and ways of knowing the rich cultural resources they bring with them to the course' (Hallpike 2014, 107). Ungar (2006) claims that there are cultural and contextual aspects to young people's lives that contribute to their resilience. His research emphasises the importance of cultural context in the fostering of individual and relational resilience. Cultural practices, norms,

behaviours and values, are then being generated through the on-going interactions among people who are situated in specific locations, in this context, the PSDE. (Sorrells, 2011).

The PSDE is a year-long intensive program, 16 weeks per semester in contrast to traditional 12- week teacher education units. The course is supported by a government initiative called Integrated Education Programme (IEP); it was developed and designed in a unique Arts and Education collaboration in 2011. The philosophy of this Diploma of Education Studies degree reflects the overall university commitment to enable entry to university degrees via alternative entry courses and increase the diversity in teacher education generally. An extended year of study credits successful students with eight units of a Bachelor degree. The course is also reflective of a commitment in the Bradley review to broaden participation of non-traditional groups into higher education (Bradley et al. 2008). Indeed, this university prides itself on being a 'university of opportunity' and therefore offering such an educational opportunity to students with teaching ambition is a part of its underlying philosophy.

At its theoretical core, the course responds to a recent call by Sahlberg (2015) to rethink government approaches to selecting teacher educators on the basis of elite performance at school, advocating instead a recruitment policy that would select more broadly from school populations representing diverse cohorts (Sahlberg 2015). In the four years since its introduction, increasing numbers are applying for this PSDE course, rates of student completion are increasing and, more importantly, a greater number of students are transitioning into the second year of the teacher education course (26 per cent in 2012 to 79 per cent in 2014). There is clear evidence that students in this course achieve as well, if not better, in comparable HE units embedded within their course.

This paper reflects with these students on the degree to which this PSDE course offers and potentially builds relational resilience. The most distinctive feature of the course is the 'group' pedagogy (Cochran-Smith, Marilyn, & Zeichner, Kenneth 2005) Student timetables and units are grouped together so that students and staff follow all aspects of the course together. Knorr (2011-12) advocates this model for preservice teachers with the important rejoinder that the quality of the social interactions by staff with the students are important in mediating group effects. The group pedagogy compares the more conventional Australian higher education, teacher education, procedure whereby students select units individually. By structuring the course around group interaction, students and staff are encouraged to build, reflect on, and maintain personal and professional relationships that are more in line with pedagogies and communities of learning as examined by Le Cornu (2009). More emphasis is therefore placed on ensuring the creation of functional interpersonal group working relationships, a collegiate approach to learning, the building of interpersonal bonds, as well as, where necessary, conflict resolution. Moreover, responsibility for such matters is shared by the students and the institutional administration in the PSDE course.

Methodology

Edwards and Apostolov (2007, 70) articulate that socio-cultural theories remind us of the importance of the dialectical and language, as participants mediate within, and between, their social settings and contexts. In this research project, student changes during the course are considered through examining two dimensions of resilience from an intra-individual and individualistic responsibility, towards the pedagogies of the teacher education context, and a more dynamic and relational, approach (Edwards 2016a, 2016b).

This research uses mixed methods including a quantitative survey, document analysis including course documents and assessment tasks, as well as qualitative semi-structured focus group interviews. As Griffin and Museus (2011, 15) point out, several perspectives of viewing data and drawing inferences are required to draw knowledge on complex social settings. In this study, we explore student's perspectives on resilience and relational resilience, in the context of a PSDE course that incorporates life-long learning strategies and emphasises sociability as a tool for learning.

The survey in this paper was a replication of the quantitative component of a study of the first-year experiences of students at the same University (see Funston, 2011 tables one and two in appendix). Note that a question on resilience was the only addition to the Funston survey. An online survey was utilised as university systems encourage the use of on-line tools, and this offered anonymity and convenience to participants. Analyses were undertaken using the Statistical Package for Social Sciences (SPSS).

Focus groups were undertaken because they are as useful to encourage reflexive discussion among students on a particular point, where the extrapolation of a conversational thread may 'add to the richness of the data' (Stage and Manning 2003, 51). The importance of conversation in negotiating social reality, as well as identity, is recognised by several social theorists and philosophers from the previous century. Shotter (1993), for example, claims that the very world in which we live is constructed in the throes of conversation.

The Comstock et al. (2008, 280) framework is a useful method for clarifying how the student focus group discusses pedagogical and curriculum-related elements of the course. Components of this pedagogical approach provide a rich and unique social context to support

relational, multicultural and social justice competencies, continuing the discussion regarding institutional responses to students' articulated

needs. The pedagogical elements of the course included:

• enhancing relational authenticity (mutual empathy, mutual empowerment)

• strengthening confidence

• building connections through peer groups and the community (including teachers, parents and other colleagues)

• stimulating desire for more connection.

These themes were not discussed explicitly with the focus groups. Rather the data were informed and analysed using this framework for

reflection and analysis amongst the researchers.

Methods

Focus Group Interviews

The focus group interviews responded to research question three. Focus group interviews were held towards the end of the course. The interviews were recorded and verbatim transcripts used to reduce and refine categories by the three researchers. The qualitative, inductive and deductive thematic analysis were informed by theories of social phenomenology and elaborated by Fereday, J., & Muir-Cochrane, E. (2006). In brief, an initial inductive stage with data reduction was started by two researchers independently. Then themes that emerged were integrated with deductive, theoretical themes as developed below. Appendix two contains the interview schedule for the focus group interviews and the results in part two below.

Participants and recruitment

The online survey was advertised at the close of tutorials, via notices in the online learning environment and emailed to all first-year students undertaking this PSDE course. The survey was completed during Week 10 of the 16-week course meaning students were somewhat established in their studies. The online survey consisted of 44 questions, comprising a mix of rating-scales and open-ended questions. For example, in one open-ended question, participants elaborated on their understanding of resilience.

Focus group sessions were held during Week 12 of the 16-week course. The focus group sessions involved between five and 15 students. Each of the focus group meetings was digitally recorded and a verbatim transcription was later developed. Building on the work of Thomas and Harden (2008), thematic analysis was used to analyse the focus group data. The data were codified line by line in an attempt to search for patterns and recurring words or phrases. Once patterns of words were identified, overarching descriptive themes were formed. These themes are described in some detail in part two of this paper.

Ethics

Ethical approval was obtained for the study prior to commencing recruitment. A key potential issue related to power. Lecturer relationships with students could taint the student participant responses during the focus group interviews. This was resolved by utilising online environments and lecturers that did not have a direct teaching relationship with the students, to recruit student participants and make them aware of interview opportunities, and undertake the focus groups.

Results

Sample demographics

Forty-three students completed the survey. This was approximately 30 per cent of total possible students in the 2013 cohort (150). Participants ranged in age from 18 years to 52 years. Most were young adults (*M* age=21.8, *SD*=6.9), with nearly half of the sample 18 years of age (41.9%), and a further 48.8% of the sample aged 19–30. Some indications of the relationship between age and the organisational capacity to engage these students are developed below. Most were female (83.7%) and one participant did not state their gender.

All participants were studying full-time. Only 14 participants had an ATAR score and these ranged from 33 to 89, with a mean of 45.62 (14.58). Fifteen participants had previously attempted study at either vocational or higher education, and the majority of these students were from a Certificate IV diploma.

Several demographic factors that have been associated with academic progress were also included. For 62.1% of the sample, English was the only language spoken at home, and for 53.5% English was the first language. The remaining 34.9% spoke other languages at home. These languages included Chinese, Dari, Greek, Italian, Macedonian, Maltese, Somali, Swahili, Thai, Turkish and Urdu. For 41.9% of the sample, the students were the first to attend University in their family. This was a significantly higher percentage of first in family to attend university than the Funston (2011) study (appendix two), where 37% were first in family to attend university. The results on ATAR, ESOL and the relatively high percentage in our sample of students who were first in their family to attend university means that the course is meeting its intended objectives of attracting new cohorts of students to teacher education.

Just under half of the sample reported having work in paid employment, with 30.5% working less than 15 hours per week and 16.3% working more than 15 hours per week or more; 44.2% didn't work in paid employment. In addition to that, many students worked in unpaid work, such as domestic duties. Of our total sample, 46.5% spent 0–5 hours per week in unpaid work, 18.6% 6–10 hours, 9.3% between 10–20 hours and 23.3% more than 20 hours per week. Of our participants, 11.6% reported having a disability that may affect their studies. In addition, 32.6% receive a Government grant or allowance to support their studies. In terms of living arrangements, the majority of participants lived with family (76.7%), while the remainder living independently.

Assessments analysed in this research were taken from a sample of four points during the student course. Assessment 1 was a brief introductory piece used to develop student confidence in writing and to support tutors in knowing their students in more depth. Assessments 2a was an individual digital presentation. Assessment 2 b was group based project to reflect theoretical and teacher practice focus in the course. The essay, assessment 3, was a longer, sustained, piece of writing somewhat typical of those in Australian teacher education of up to 3,000 words. The method of analysis included analysis of the final student grade over the year.

Part one. Resilience and self-perceived academic skills

The single item resilience question was as follows: 'Resilience is sometimes defined as 'the ability to recover readily from or resist being affected by a setback, illness, etc.' (Oxford University Press 2007). Are you the sort of person who bounces back? How would you describe yourself?' Participants were able to select from

• Very resilient

• Quite resilient

• Not especially resilient

• Not resilient

• I cannot answer this

The first author (GG) constructed this simple definition as it seemed most appropriate and an easily understood definition of resilience for the students.

Two participants indicated they could not answer, and their responses were removed from the analysis below. Four additional participants did not answer the item. Most participants ranked themselves as quite resilient (64.1%) or very resilient (15.4%), with only a small percentage ranking themselves as not especially resilient (12.8%) or not resilient (2.6%). There is no correlation between resilience and age, hours worked in paid or unpaid work, and academic outcomes. Unlike the fairly high degree of self-perceived resilience in the sample, many participants did

not perceive themselves to possess important academic skills. The most highly endorsed skill was being a good listener, and the least endorsed was reading and extracting information efficiently (see Table 1). When tallied, many participants only felt they possessed one of the available skills ($n=8$, 20.5%), with a fairly even spread in the distribution up to the maximum score of 8, with a mean of 4.02 ($SD=2.03$).

The total self-perceived skills were also significantly inversely correlated with ATAR score. The higher the ATAR the lower students perceived their self-perceived scores above. Self-perceived skills were positively correlated with assessment task 1, but no other assessment. The inverse relationship between self-perceived skills and ATAR was further investigated with a scatterplot, and although there was one univariate outlier with a very high ATAR score of 89 ($z=2.98$), an inverse relationship was apparent. Caution must be exercised regarding this result as the cohort with an ATAR score was small ($n=14$).

Ratings of resilience were also compared against each individual self-perceived skill in Table 1 above. The only skill that showed a significant difference across ratings of resilience was the item 'I know when and how to ask for help'. Students who rated themselves as possessing this skill also rated themselves as significantly lower on resilience than students without that skill. This is a somewhat puzzling result as 'asking for help' is also be considered a useful characteristic in academic settings. A pattern was evident in all skill items indicating students who felt they did not possess these academic skills tended to rate themselves as more resilient. This inverse relationship is perhaps a matter for concern as dogged persistence of itself, without a pedagogy developing the necessary skills, could result in misapplied effort and energy.

Resilience ratings were then compared across demographic factors, followed by self-perceived skills. Neither total self-perceived skills nor resilience systematically differed across any demographic variables. Cohorts for some variables (e.g. disability status) were small so results here were treated with caution.

A number of interrelationships between demographic factors, ATAR and academic performance emerged. Age was positively correlated with hours in unpaid work, suggesting unpaid work is undertaken more as students move up the age range with responsibilities for children or elder parents. Age was also positively correlated with outcomes on assessment task 3, an essay, but no other assessment task. Strangely, ATAR was strongly inversely correlated with assessment task 2a.

Thus, the quantitative data is inconclusive and surprising in relation to resilience as measured by the items in this questionnaire, suggesting that focus groups and wider research data might unpack some of this information. Significant relationships were not apparent between self-rated resilience and most demographic factors including age, hours in paid or unpaid work, or ATAR score (n=14). Relationships were also not present between resilience and all assessment items, as well as the final grade. Curiously, the higher the resilience score, the lower the total self-perceived skills tended to be.

The research explored learning skills considered relevant to resilience, ranging from self-perceived computer skills to somewhat more socially complex concepts, such as the idea that one considers oneself a 'good listener'. A significant majority said they were good listeners while a lower number reported that they possessed adequate computer skills for research and assignments. Social confidence in terms of building appropriate relationships and working collaboratively saw a lower number of positive respondents. This is a significant insight and speaks to the

confidence of the demographic. Time management was an issue for almost 50 per cent of respondents, as was 'knowing when to ask for help'. Speaking with confidence in a group fetched a low majority of positive respondents, while reading and extracting information efficiently was an issue for a significant majority. This indicates that we have our work cut out for us as an institution since this skill is what many may perceive as the primary activity for academic pursuit.

Part two. Relational resilience

In this section, we turn our attention to the interpretation of student experiences, in relation to the notion of institutional and relational resilience, both in the higher education context and over the whole course of participants' educational lives (eg primary and secondary school).

Relational authenticity

Nine Diploma students in the 2013 cohort agreed to contribute to the focus group interviews.

The first topic of conversation related to the positive elements of their first school experience, linked to their Higher Education unit which these students had completed the previous week. The question was framed in general terms: 'What has been your most positive experience on the course so far?' and the discussion immediately shifted to the classroom practice and experiences. 'Going to the classroom and getting that little bit of experience and you need to have a couple of them so that you feel more confident as you go', one student noted. Thus, the opportunity to start to create connections in an authentic manner in the schools was reinforced early.

Clear links between the expertise of the tutor, a former principal, appeared to build student capacity to relate to the possibilities for a teaching career. 'It was great to get the first-hand experience and how it was when he first started teaching'. Further, participants seemed to appreciate 'having him do the lectures and tutorials where he explained things thoroughly', and reinforced the importance of staff with experience in teaching contexts. For the mature students who had not been back to primary schools, the school experience 'gave them an understanding of the expectations' in schools in relation to themselves and their course. Students reinforced similar views on the authenticity of the coursework and link with the schools. For example, how the praxis inquiry (PI) walk then linked back to their course work. 'It (PI) gave me the content knowledge and theory to give me the base knowledge for tutorials'.

The placement experience clearly conveyed a sense of mutual empowerment and engagement between and amongst the students and with their tutors. By transferring our pedagogy from the university classroom environment to experiences in the community, students were given agency to reflect on themselves as teachers and learners in the world. This tends to shift the emphasis of the education from within the walls of the institution and places it in the self of the students and teachers, reflecting on human experience generally, rather than knowledge transfer or even the overt experience of learning in a pedagogical environment. The sense of mutual empathy and reciprocity within the group discussion was further evident later in the discussion in response to the question: 'Are there any ways in which you experienced staff communicate high expectations of you succeeding as a teacher in the future?' Responses included [the tutor] 'gives us good information about how to be a successful teacher. He shows us how the student would feel by modelling bad teaching'. Another example: [The tutor], 'his past experience (as a

principal) about what to do and what not to do is valuable.' Here, the practice-based experiences and tales from the school placement enabled students to make connections and develop.

Strengthened confidence

Students reflected that having the same teacher developed their 'social interactions' and hence their confidence. For the students in the focus group, this was particularly the case with maths. The [tutor] 'does not just sit there and put the method on the board; he will make it fun; otherwise you lose concentration' and 'after the first week or two if you asked for help he showed you a simple way of doing the maths and, instead of people over-thinking it, he gave you more confidence that anything you put on the board, you could complete it.' This could be regarded as somewhat surprising given maths is traditionally a difficult topic in which to engage some students.

Connections through peer groups

As the course allocates students into groups from their orientation and enrolment phase, rather than allowing students to enrol on an individualistic basis, student connections are co-constructed by the course coordinators. Students reflected *'being put in groups with people that you would not necessarily talk to in your classes and being forced to interact with them gives you the sort of skills that you need to teach and you do need to interact with everyone'* and '*getting put into groups with people you would not even talk to and getting to know them and making friends with them was helpful in developing my understanding of the course'*.

One student specifically linked a future role as a teacher with the course group structure and pedagogies: '*Being able to talk socially trying to make sure everyone in the group feels welcome so if someone isn't talking having a chat with them so they have confidence to chat to others; so, this is good teaching.*' This feedback from students suggests that the social connections student teachers in the course formed with each other, encouraged new ways of looking at the world through experiencing unfamiliar points of view and fostering empathy with others whom we perhaps may not have ordinarily engaged with outside the course and its very deliberate social structure.

Relational resilience as a desire for more connection

Students connected with the course curriculum and future teaching roles including teaching placement with their responsibilities as citizens and as future teachers. The first connection relates to how they needed to frame diversity through '*accepting difference and embracing that this is a good thing because everyone in the course is different and just like students you will teach, they are different and diversity should be embraced*'.

More technical connections with academic skills were also observed through the statements on the course and how preparing for assignments also linked to future roles as a teacher. '*Preparation is important so we have to prepare for assignments as a teacher, you have to prepare teaching plans and sometimes we have to think about how to communicate to kids so preparation is the key*'.

Discussion

The sample of students in this PSDE course reflects a population of non-traditional students from culturally and linguistically diverse backgrounds, which form much of the student body at this university. They are 'diverse', first-in-family to come to university, from lower socioeconomic communities and speaking more languages at home compared with their mainstream teacher education colleagues. These students might have had lower success rates in the past but in this course, focused on a teacher education goal, they succeeded similarly to, and in many cases, better than their higher ATAR colleagues.

As the research above illustrates, there is a somewhat counter-intuitive relationship between resilience and self-perception of academic skills. Interestingly, when interviewed towards the end of their teacher education, students from this course reflected how strongly the course had prepared them for academic writing and referencing (Interview, 26 May 2016). In other words, the relationship between resilience and overcoming the barrier of self-perceived academic skills might show a closer relationship when measured over a longer term.

The only self-perceived skill that was regularly associated with ratings of resilience was the item, 'I know when and how to ask for help'; where students perceived themselves as having lower resilience. This suggests that all students are likely to need ongoing and directed links to academic support and writing. This may also be suggestive that many students possess an individualistic conception of resilience, as individuals who ranked themselves high on resilience were less likely to ask others for help. Despite this conception, approach coping styles have been shown to be adaptive in numerous studies (Park & Adler, 2003). A number of other interrelationships emerged. Older students undertake more

unpaid work, possibly indicating greater participation in domestic duties. Inconclusive relationships also emerged between academic outcomes, age and ATAR score.

Still more troubling is the respondents 'beliefs regarding their ability to make, consider and make sense of, complex ideas or arguments. What we do not know from this self-reported data is the distinction between objective and subjective perceptions of reality; participants may rate themselves low on this item despite a relatively high level of skill if tested objectively. The current research is unable to make this conclusion as self-reported items inherently contain subjectivity. Participants lack of belief in their capacity to consider complex ideas' also plays into some other factors recorded below relating to languages spoken at home, first-in-family University educated and internet access at home. The identification of such issues facing our students means we can reflect on ourselves as an institution and how we might tailor courses such as the PSDE so as to meet students' needs more readily and equip them to address some of their challenges in both education and life.

The Comstock framework; relational authenticity, strengthening confidence, connections through peer group and creating conditions for more connections, offers a useful way for institutions to examine the relational conditions to support a diverse teacher education population.

A significant number of participants speak a language other than English at home and an even greater number, than traditional preservice teacher education courses, reported that English is not their first language. We are therefore potentially populating the teaching profession with a new breed of teacher, one better able to empathise with a growing student population of migrants and people from non-English speaking backgrounds, at the same time prioritising resilience and relational resilience above more traditionally valued "academic" skills, such as essay-writing. This is particularly important when one considers the notion of relational resilience. What the research indicates here is, that institutions

need to become more equipped to provide for students with diverse cultural backgrounds, different abilities or 'first-in-family' university students. By modelling and encouraging resilience in student teachers, we not only foster relational resilience in our own institution, but in the education system generally because the qualities of contemporary teachers are likely to be passed on to the students they teach.

The framework for examining the course participant responses;

In terms of individual resilience, the implications of these data are unclear, other than to suggest that longer term data might reveal some developmental patterns among preservice teacher cohorts in the variables of interest. Some students may need development of specific academic skills, knowledge or framing but who these students are is not well defined by the concept of 'resilience'. This survey is limited, in defining resilience, and that the intensity and duration of this first year course may support confidence and impact on longer term engagement. It is also possible that the addition of analysis examining variance in the relationship between resilience and assessment outcomes and controlling for the effect of self-perceived skills and demographics may have added depth to the current quantitative analysis?

Although 30% response rate for the on-line, self-report survey might be described as limited, James, Krause, and Jennings (2010) point out this is a reasonably common HE response rate. In addition, the percentage survey responses are similar to rates reported by (Nulty 2008, 304); so, we might conclude provide a reliable measure of the students' perceptions of 'resilience' at the time.

Conclusion

This research and the lack of clarity in the meaning of 'resilience' in the measures examined in this research, points to potential problems in new requirements for the apparent measurement of resilience in students entering the profession. Overall, results suggest a lack of relationships between resilience and self-perceived academic factors, including academic performance in a first year unit and student demographics. Thus, while it may seem plausible to consider the concept of resilience, as the current policy states, in terms of clarifying the qualities of individuals or cohorts, our research here does not show particular evidence that this is relevant to self-perceived academic skills; with the exception of asking for help. Thus, we question the merits of selecting preservice teachers on self-reports of 'resilience' where the links between such characteristics are limited and tentative. We must qualify this statement with the indication that the single-item measure of resilience here is very simple and not yet validated. Other, more sophisticated and validated measures may show stronger relationships with academic performance or self-rated skills.

The lack of significant relationships may indicate that prospective preservice teachers cannot recognise their own 'resilience'. We acknowledge that more research may be useful in specific relation to the concept of 'resilience' and relational resilience for students and others engaged in Australian higher education, particularly in the area of teacher education.

There are somewhat obvious limitations with this study, including the relatively small sample size and the single item, self-report measure with nascent validity. What we are exploring in this study is the experience of individual and small collectives of student participants. Therefore,

the observations and descriptions they provide constitute the data and the study then is primarily of a qualitative nature. The narrow focus with a small sample is appropriate to provide specifics on the attempts to provide detail on relational resilience explored in the study.

The student perceptions of confidence were not misplaced as the pass rate for the maths unit in 2013 was 88%. A comparison on two course units these students completed during third year with their higher ATAR colleagues in the more regular teacher education course illustrated no significant differences in the pass rates or the grade distribution. These students who transitioned into the second year of the Bachelor course achieved passes in maths on a comparable basis in their maths units with students from the first year who had higher ATAR scores.

Whether resilience is best considered a single, underlying psychological quality or a series of related, but distinctive characteristics, it certainly remains a major theoretical and measurement issue. Australian research indicates that the quality of university courses can attract and enable diverse cohorts of students to complete a degree (Chesters and Watson 2014). Current evidence suggests that individualistic, resilience concepts as we have examined here is of limited utility if the broader socio-ecological and institutional frameworks are not taken into account (Gianesini 2012).

Relational resilience concepts; course authenticity, confidence creating approaches such as longer timeframes for the course, peer group connections and ways of generating more connections in such courses, seem more promising concepts to consider how, or not, universities might enhance student success through programs that seek to contribute to and regularly assess student well-being, satisfaction and retention. Further, this course with its diverse cohort(s) illustrates the ways in which students can transcend challenges such as social class, first-in-family and

ATAR scores, as well as continually reflecting on course support structures so as to enable diverse teacher populations to flourish. The focus group data reveals capacities to make strategic choices that support relational resilience for academic success as well as the multi-dimensional and contextual processes that are negotiated in context. The constructs of capacity to make connections, connectivity through construction of peer groups and community, strengthened confidence through tutor engagement and course authenticity are much more useful to teacher educators in student selection and student success.

This research, tied to a particular PSDE course, indicates student success as coexisting in relation to the role of academic staff and pedagogies, directed toward facilitating transformative student learning experiences. The participant voices presented in this paper affirm and echo how higher education systems can enable and encourage a student's capacity to deal with the day to day opportunities and challenges of university life. We encourage staff developing higher education courses to focus on relational resilience and how students make connections within their course through mutually dynamic respectful relationships; authentic experiences related to context, through empathy, mutual empowerment and growth fostering approaches.

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Appendix 1

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APPENDIX 2

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