

## 2024 AERA Invited symposium submission form

1. Symposium title: Indigenous success in higher education
2. Symposium point of contact: Dr Thu D Pham
3. Symposium chair if different from Point of contact: Professor Peter Anderson
4. Email addresses and institutions for presenting and non-presenting authors and any non-author participants such as discussants, if applicable.

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### 5. Abstract of no more than 120 words

A plethora of factors have influenced the completion rates of Aboriginal and Torres Strait Islanders peoples (hereafter respectfully referred to as Indigenous peoples). Although the completion rates of Indigenous university graduates (i.e., Bachelor, Master, and Doctorate) are growing, in line with increases in enrolments over the past decade, the completion rates of Indigenous graduates remain alarmingly low compared to non-Indigenous graduates in Australia. A range of factors continue to affect the retention and completion of Indigenous students, including lack of quality supervision, racism, discrimination, and low socio-economic status. In this symposium, we are sharing findings from three papers focusing on factors that lead to the completion of university degrees by Indigenous students.

### 6. Session summary

#### ***Objectives of the session***

In this symposium, we aim to present an understanding of the social determinants that influence the success of Indigenous students in Australian higher education.

#### ***Overview of the presentation***

Our presentation consists of the three papers, with each subsequent paper building up from the preceding ones.

### ***Scholarly or scientific significance***

The significance of our presentation includes:

1. Contributing new knowledge to the existing literature about social determinants influencing the participation of Australian students in higher education, with an efficient and focused gaze on Indigenous students;
2. Extending the theoretical frameworks of social determinants of health and social determinant of education. The new framework can be powerful in explicating and unearthing the critical dynamics of social determinants for Australian university students. This is especially pertinent for Indigenous students, who typically occupy a socio-educationally disadvantaged position in the Australian society;
3. Privileging the voices of Indigenous students who successfully completed their degree in higher education and explore the attributes to their success; and
4. The originality of the research lies in the creation of a unique dataset by a larger national survey that will allow to aggregate social determinants of Australian students pursuing higher education.

As such, the study will provide evidence from a national-level sample of Australian students, offering significant insights into factors that have an impact on students' completion.

### ***Structure of the session***

In paper 1 we share the findings from a systematic review of the international literature pertaining to Indigenous research students' retention and completion rates. Paper 2 and paper 3 are based on findings from a survey that was completed by 2,528 Australians (including 308 Indigenous Australians) aged 18 and over who had graduated from university in the last five years (2018 – 2022). In paper 2, we present our model for the social determinants of higher education, developed from the social determinants of health and social determinants of education frameworks, and informed by literature reviews on factors influencing the completion of a university degree. The model was then validated through confirmatory factor analysis, which is suggested to be useful in identifying factors that influence the completion of Indigenous and non-Indigenous Australian graduates. In paper 3, we share findings based on the Indigenous participants who graduated from an Australian university in the last five years. We highlight the factors that have been discovered to exert influence on Indigenous students' university degree completion from the perspective of Indigenous students. The implications stemming from our studies and shared in this symposium are connected to fostering and promoting pathways for Indigenous success in higher education.

### **7. Individual paper/ presentation summary (150-500 words):**

**Paper 1 title: Indigenous higher degree by research students' retention and completion: A systematic review**

**Authors:** Dr Angela Baeza, Dr Congcong Xing, Dr Thu Pham, Dr Levon Blue, Melanie Seward, and Professor Peter Anderson

**Objectives or purposes:**

As the first of its kind, this systematic literature review provides an international perspective that allows the understanding of the barriers and challenges Indigenous students have experienced that affect their success in higher education. Indigenous higher degree by research (HDR) students continue to face academic barriers that negatively impact completion rates. However, Indigenous HDR success in completing a research degree is critical to building a critical mass of Indigenous academics and researchers in higher education institutions.

### **Perspective(s) or theoretical framework**

This systematic review of existing literature involved collaboration between authors representing both Indigenous and non-Indigenous perspectives. Our individual standpoints played a significant role throughout the entire research process, shaping the way data and results were interpreted.

### **Methods, techniques, or modes of inquiry**

This paper presents the findings of a systematic literature review that use PRISMA as the main methodology. Two research questions guided this process: 1) What barriers affect entry into, and completion of, HDR programs by Indigenous people? 2) What are the enablers that facilitate the continuation and completion of HDR programs by Indigenous people?

### **Data sources**

The final data set considered 17 studies published from 2016 to 2022 on Indigenous HDR students that revolve around or relate to the retention or completion levels. Literature involved research from Australia, Canada, New Zealand, and the United States.

### **Results and/or substantiated conclusions or warrants for arguments/point of view - Scientific or scholarly significance of the study or work**

The review identifies that the barriers to Indigenous HDR students' retention and completion includes institutional racism and social isolation, inadequate supervision and shortage of Indigenous academic to support Indigenous HDR students, socio-economic concerns and family commitments, and lack of confidence in academic abilities; while the enablers for Indigenous HDR students' success include supporting mechanisms, facilitating environments, support from family and community, Indigenous knowledge and perspectives, and individual characteristics. This review indicates a pressing need for enhanced support aimed at bolstering completion rates among Indigenous research students.

## **8. Individual paper/ presentation summary (150-500 words): Paper 2**

### **Paper 2 title: Measuring social determinants influencing the completion of university degrees: a Confirmatory factor analysis**

**Authors:** Dr Thu Pham, Dr Angela Baeza, Dr Levon Blue, Professor Peter Anderson, Dr Dr Congcong Xing, Rhett Chappell, and Melanie Saward

### **Objectives or purposes**

Research on social determinants of students entering higher education has attracted worldwide attention over the last two decades. Additionally, a growing body of literature has documented factors impacting the completion of university students. We aimed to identify the factors that contribute to and influence students' completion of a university degree in Australia.

### **Perspective(s) or theoretical framework**

Drawing on the foundations of the social determinants of health and the social determinants of education frameworks, we have formulated the social determinants of higher education framework. This framework was used to explore the impacts that these social determinants have on the completion of Australian university students.

### **Methods, techniques, or modes of inquiry**

The research question guiding this paper is: What are the main multidimensional factors that drive Australians to complete a university degree? To identify these factors, we designed a survey that includes five social determinants/factors developed from the social determinants of health, social determinants of education frameworks as well as the factors already identified in the literature. This study firstly validated the model of the social determinants of higher education we developed by testing several different models. Through this model, we employed confirmatory factor analysis (CFA) to validate the four-factor model and explored its influence on the successful completion of higher education among students in Australia. Subsequently, we conducted a series of Mann-Whitney U-tests and Kruskal-Willis H-tests for non-parametric data to examine statistically significant differences among factors impacting students' completion, based on demographic variables such as gender, Indigeneity, and level of degree completion.

### **Data sources, evidence, objects, materials or the equivalent for theoretical or methodological papers/ presentations**

We recruited 2,528 graduates, including 308 Indigenous graduates aged 18 and above who had graduated from an Australian university in the past five years (2018 to 2022).

### **Results and/or substantiated conclusions or warrants for arguments/point of view - Scientific or scholarly significance of the study or work**

This study suggests a framework encompassing four social determinants of higher education is useful in measuring the factors influencing the university completion of both Indigenous and non-Indigenous students in Australia. The implications from this research point towards the significance of health and well-being, economic factors, and employment. Addressing these aspects may contribute to maintaining high completion rates in higher education.

## **9. Individual paper/ presentation summary (150-500 words): Paper 3**

**Paper 3 title: Understanding the factors influence Indigenous student success in Australian higher education**

**Authors:** Dr Thu Pham, Dr Levon Blue, Dr Angela Baeza, Dr Congcong Xing, Melanie Seward, and Professor Peter Anderson

**Objectives or purposes:**

This study aims to understand factors that contribute to Indigenous students' completion of a university degree, and to amplify Indigenous students' voice for innovative solutions to foster Indigenous student success.

**Perspective(s) or theoretical framework**

The social determinants of higher education framework was validated in paper 2 and used to explore the factors influencing Indigenous student success in completing their university degree from the perspective of Indigenous students.

**Methods, techniques, or modes of inquiry**

The study adopted a multi-method approach to investigate the factors that influence Indigenous students' completion. The results and findings present the descriptive quantitative, ranking factors results, and the qualitative method using thematic analysis to analyse the reasons behind the ranking and open-ended responses to explore the three most impact factors influencing students' completion from the Indigenous students' perspective.

**Data sources**

Survey of 308 Indigenous Australian university graduates who graduated between 2018-2022.

**Results and/or substantiated conclusions or warrants for arguments/point of view - Scientific or scholarly significance of the study or work**

We found that the social environment, the economic condition, and the individual characteristics factors were identified as the most three important factors accordingly. Indigenous students also revealed that mental health issues such as stress, depression, and Covid-19 pandemic strongly impacted student life and triggered their withdrawal consideration. The study suggests that Indigenous students need holistic support during their university study to overcome barriers arising during their journey and to be successful in completion. It is essential to give significant attention to mental health problems and ensure that mental health services are accessible and affordable for Indigenous students as well as other students who have encountered stress and depression throughout their academic journey.

**10. If preferred you can upload all documents combined into one upload here**

**11. If you have any explanatory comments about your submission, please provide them here**