

The intersection between driver licensing, employment, and health for Aboriginal and Torres Strait Islander Australians

by Bobby Porykali

Thesis submitted in fulfilment of the requirements for
the degree of

Doctor of Philosophy

under the supervision of Associate Professor Melissa Kang,
Professor Rebecca Ivers, Doctor Kate Hunter, Professor
Nareen Young and Doctor Patricia Cullen.

University of Technology Sydney
Faculty of Health

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I, Bobby Porykali declare that this thesis, is submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the School of Public Health/Faculty of Health at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

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Romans 8:28 *'And we know that all things work together for good to them that love God, to them who are the called according to his purpose'*

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Format of thesis

This is a thesis by compilation of published (Chapters Two, Four, Five and Six) and unpublished (Chapters One, Three and Seven) research.

List of publications arising from this research

Paper #1	
<i>Title:</i>	The effectiveness and impact of driver licensing programs on licensing and employment rates for Aboriginal and Torres Strait Islander peoples of Australia: A systematic review.
<i>Authors:</i>	Bobby Porykali , Kate Hunter, Alyse Davies, Nareen Young, Elizabeth Sullivan, Rebecca Ivers.
<i>Journal:</i>	Journal of Transport and Health.
<i>Status of publication:</i>	Accepted (27 April 2021).
<i>Unique contribution to knowledge</i>	This is a systematic review presented in Chapter Two of the thesis. It identifies and describes all Aboriginal and Torres Strait Islander driver licensing support programs being delivered throughout Australia. Further, it evaluates the effectiveness and impact of these programs on licensing attainment and employment rates for Aboriginal and Torres Strait Islander peoples.
Paper # 2	
<i>Title:</i>	Process evaluation of an Aboriginal driver licensing pilot program in the Australian Capital Territory.
<i>Authors:</i>	Bobby Porykali , Patricia Cullen, Kate Hunter, Kate Patten, Nareen Young, Rebecca Ivers.
<i>Journal:</i>	Health Promotion International.
<i>Status of publication:</i>	Under review.
<i>Unique contribution to knowledge</i>	This is a process evaluation of an Aboriginal and Torres Strait Islander driver licensing pilot program in the Australian Capital Territory, which is presented in Chapter Four. It evaluates program

	outcomes, examines whether the program was delivered as intended according to the key service areas and in a culturally relevant format.
Paper # 3	
<i>Title:</i>	The road beyond licensing: the impact of a driver licensing support program on employment outcomes for Aboriginal and Torres Strait Islander Australians.
<i>Authors:</i>	Bobby Porykali , Patricia Cullen, Kate Hunter, Kris Rogers, Melissa Kang, Nareen Young, Teresa Senserrick, Kathleen Clapham, Rebecca Ivers.
<i>Journal:</i>	BMC Public Health.
<i>Status of publication:</i>	Accepted (11 November 2021).
<i>Unique contribution to knowledge</i>	This is a quantitative paper examining the impact that a driver licensing support program directly has on employment outcomes of program clients, which is presented in Chapter Five.
Paper # 4	
<i>Title:</i>	How does a driver licensing program influence transitions into employment for Aboriginal and Torres Strait Islander people? Using the Self-Determination Theory to explore client experiences of a driver licensing pilot program in the Australian Capital Territory.
<i>Authors:</i>	Bobby Porykali , Kate Hunter, Melissa Kang, Patricia Cullen, Nareen Young, Rebecca Ivers.
<i>Journal:</i>	BMC Public Health.
<i>Status of publication:</i>	Under review.

<p><i>Unique contribution to knowledge</i></p>	<p>This is a qualitative paper exploring client experiences on the influence driver licensing programs have towards facilitating positive transitions into employment. This is presented in Chapter Six.</p>
<p><i>Other comments:</i></p>	<p>A report of the Australian Capital Territory Aboriginal and Torres Strait Islander driver licensing pilot program was also prepared whilst undergoing this thesis. The report is included in Appendix 3.</p>

Note on author attribution

Chapter One	
Reference	This is an unpublished Chapter in the thesis.
Contribution	I, Bobby Porykali conceptualised this chapter with supervisors Melissa Kang, Kate Hunter, Nareen Young, Patricia Cullen and Rebecca Ivers. I was the primary researcher involved in writing the chapter.

Chapter Two	
Reference	Porykali, B. , Hunter, K., Davies, A., Young, N., Sullivan, E., Ivers, R. The effectiveness and impact of driver licensing programs on licensing and employment rates for Aboriginal and Torres Strait Islander peoples of Australia: A systematic review. <i>Journal of Transport and Health</i> . 2021; 21:101079.
Contribution	I, Bobby Porykali contributed to conceptualisation with co-authors Elizabeth Sullivan, Kate Hunter, Nareen Young and Rebecca Ivers. I conducted the search and was the primary researcher involved in writing the manuscript.

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Chapter Four	
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Chapter Five	
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Statement of contribution of authors

Graduate Research Student	BOBBY PORYKALI	LEAD AUTHOR
Principal	MELISSA KANG	JOINT AUTHOR
Co-supervisor (1)	KATE HUNTER	JOINT AUTHOR
Co-supervisor (2)	NAREEN YOUNG	JOINT AUTHOR
Co-supervisor (3)	PATRICIA CULLEN	JOINT AUTHOR
Co-supervisor (4)	REBECCA IVERS	JOINT AUTHOR
Co-author:	ELIZABETH SULLIVAN	JOINT AUTHOR
Co-author:	ALYSE DAVIES	JOINT AUTHOR
Co-author:	KATE PATTEN	JOINT AUTHOR
Co-author:	KRIS ROGERS	JOINT AUTHOR
Co-author:	TERESA SENSERRICK	JOINT AUTHOR
Co-author:	KATHLEEN CLAPHAM	JOINT AUTHOR

Signature

Graduate Research Student	Production Note: Signature removed prior to publication.	<i>26/11/2021</i>
Principal (Melissa Kang)	Production Note: Signature removed prior to publication.	<i>26/11/2021</i>
Co-supervisor (Kate Hunter)	Production Note: Signature removed prior to publication.	<i>26/11/2021</i>
Co-supervisor (Nareen Young)	Production Note: Signature removed prior to publication.	<i>26/11/2021</i>
Co-supervisor (Patricia Cullen)	Production Note: Signature removed prior to publication.	<i>26/11/2021</i>
Co-supervisor (Rebecca Ivers)	Production Note: Signature removed prior to publication.	<i>26/11/2021</i>
Co-author (Elizabeth Sullivan)	Production Note: Signature removed prior to publication.	<i>29/11/2021</i>
Co-author (Alyse Davies)	Production Note: Signature removed prior to publication.	<i>26/11/2021</i>
Co-author (Kate Patten)	Production Note: Signature removed prior to publication.	<i>29/11/2021</i>
Co-author (Kris Rogers)	Production Note: Signature removed prior to publication.	<i>26/11/2021</i>
Co-author (Teresa Senserrick)	Production Note: Signature removed prior to publication.	<i>26/11/21</i>
Co-author (Kathleen Clapham)	Production Note: Signature removed prior to publication.	<i>26/11/21</i>

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Abbreviations

ACT Australia Capital Territory

ADI Accredited Driving Instructor

ALRC Australian Law Reform Commission

ALS Aboriginal Legal Service

APY Anangu Pitjantjatjara Yankunytjatjara

CBTA Competency Based Training and Assessment

DESE Department of Education, Skills and Employment

GLS Graduated Licensing Scheme

ICIP Indigenous Cultural and Intellectual Property

IMI Intrinsic Motivation Inventory

L Learner

MMAT Mixed Method Appraisal Tool

MT Maralinga Tjarutja

NEET Not in employment, education or training

NSW New South Wales

NT Northern Territory

O Open

OR Odds Ratio

P Provisional

PRISMA Preferred Reporting Items for Systematic Reviews and Meta-Analysis

PRISMA-ScR Preferred Reporting Items for Systematic Reviews and Meta-Analysis
extension for scoping reviews

QLD Queensland

R Regional

Rem Remote

ROA Remoteness of Area

RTP Research Training Program

SA South Australia

SAS Statistical Analysis System

SDT Self-Determination Theory

TAS Tasmania

TfNSW CRS Transport for NSW Centre for Road Safety

U Urban

VTEC Vocational Training and Educational Centres

VIC Victoria

WA Western Australia

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Abstract

Employment and driver licensing are key social determinants for improving health outcomes. In addition, having a valid driver licence and access to transportation improves health and wellbeing by increasing accessibility to essential services such as healthcare and employment, and enabling participation in family, community, and cultural responsibilities. Aboriginal and Torres Strait Islander peoples are under-represented as driver licence holders. As such, community-based programs were developed to provide culturally appropriate support for clients to obtain a driver licence. This research set out to examine a driver licensing support program to understand the impact they have on client employment outcomes. In doing so this work aims to understand the intersection between driver licensing, employment, and health for Aboriginal and Torres Strait Islander Australians.

This work included a systematic review, and a mixed method approach, including use of Indigenous research methods, was used to examine two independent Aboriginal and Torres Strait Islander driver licensing support programs – The Australian Capital Territory Aboriginal and Torres Strait Islander driver licensing pilot program; and the ‘Driving Change’ program.

The systematic review showed that forty-two programs were identified as being delivered across Australia, however very few ($n = 4$) were evaluated, and none examined the impact on employment outcomes. End-to-end programs that provide support in a culturally appropriate way were most effective in improving licensing attainment rates amongst clients, particularly students (secondary and tertiary) aged between 16-24 years. The program evaluations showed that The ACT program was acceptable and successful in supporting licensing attainment. Clients who attended the Driving Change program and achieved an independent licence were more likely (OR: 2.5, CI: 1.22 – 5.24, $p = 0.011$) to report gaining a job/or having a change in job and clients participating in programs from regional areas were more likely (OR: 1.72, 95% CI: 1.27 – 2.33, $p < 0.001$) to obtain an independent licence than those from urban areas. Transitions into employment through the licensing programs seemed to result from increased intrinsic motivation characterised by improved sense of self-esteem, self-confidence and wellbeing.

The research highlights the need for better recognition of licensing as key facilitator of employment, and the importance of sustained funding for Aboriginal community run licensing programs. Further, this research has highlighted the need for stronger evaluations including collection of employment data. Increasing employment opportunities for young Aboriginal and Torres Strait Islander people is key to addressing health inequities and driver licensing can play a key role in this.