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Impact Evaluation of a Central Australian Aboriginal Cultural Awareness Training Program for Health Professionals and Students

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Impact Evaluation of a Central Australian Aboriginal Cultural Awareness Training Program for Health Professionals and Students

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Abstract

The aim of this study was to prospectively evaluate the impact of a Central Australian cultural awareness training program for health care staff. A mixed methods approach was used. Program participants completed a baseline and post-program questionnaire, which included an attitude scale assessing cultural safety, critical thinking and transformative unlearning, and open-ended questions. An online follow-up survey two months later repeated these questions. Mean scale scores were compared using paired and unpaired t-tests. Qualitative data were analysed thematically. Baseline scale mean was 45.7. At post-program it had statistically significantly increased to 47.3, using both the paired ($p < 0.01$) and unpaired t-test ($p < 0.03$). At the two-month follow-up it had decreased to 42.2. This was not statistically different from the baseline score with a paired ($n=11$) t-test ($p < 0.37$), however the difference was statistically significant with an unpaired t-test ($p < 0.01$) which included an additional eight respondents. Qualitative feedback was consistently positive. Many respondents learnt new information about the negative effects of colonisation on Aboriginal and/or Torres Strait Islander people, and how this continues to affect current health. Learning about Aboriginal and/or Torres Strait Islander cultures, kinship relationships and systems, and communication styles was identified as directly relevant to work practices. A cultural education program produced positive short-term changes in attitudes and was highly valued by participants. However, it is unclear if these changes are maintained in the medium term.

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Keywords

cultural awareness, professional education, access to care, equity

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Cultural competence is “the ability to participate ethically and effectively in personal and professional intercultural settings” (Sherwood, 2021, para.1). It is a broad concept which includes strategies to improve access to health services and health outcomes for diverse peoples, usually minority population groups (Clifford et al., 2015). It is often regarded as a strategy to reduce health inequities, although there is little evidence linking cultural competence to patient outcomes (Horvat et al., 2014).

In Australia, Aboriginal and Torres Strait Islander cultural awareness education, a first step towards cultural competence, is usually a standard induction component for new staff of government and non-government agencies, and many large organisations. Cultural awareness is:

An understanding of how a person’s culture may inform their values, behaviours, beliefs and basic assumptions, and ... recognises that we are all shaped by our cultural background, which influences how we interpret the world around us, perceive ourselves and relate to other people (National Faculty of Aboriginal and Torres Strait Islander Health, 2022, pg.1).

In the Northern Territory (NT) of Australia it is particularly relevant, given that nearly a third (30%) of the NT population is Aboriginal and/or Torres Strait Islander, and almost three quarters (70%) of NT health service clients are Aboriginal and/or Torres Strait Islander people (Li et al., 2011).

Aboriginal and Torres Strait Islander cultural training for health workers has been conceptualised into six models: cultural awareness, cultural competence, transcultural care, cultural safety, cultural security and cultural respect (Downing et al., 2011). The models differ in their relative focus on individual versus system change, and whether they focus on health workers understanding their own culture versus that of another. The term ‘cultural responsiveness’ is recommended by Indigenous Allied Health Australia, referring to strengths-based, action-orientated approaches that enable Aboriginal and Torres Strait Islander people to experience cultural safety (Indigenous Allied Health Australia, 2019).

Ryder et al. (2019) discusses three themes that are important to shift attitudes and behaviours in future health professionals when working with Aboriginal or and Torres Strait Islander people and communities to achieve better health outcomes. They include cultural safety, critical thinking and transformative unlearning. Transformative unlearning is guided personal growth and an educational process informed by a de-colonial epistemology, and requires an approach in which learning to unlearn must occur in order to relearn (Ryder et al., 2019).

In practice, cultural awareness programs (or similar) offered by large organisations vary from two hour to multi-day immersive experiences, led by a local Aboriginal and/or Torres Strait Islander educator, and cover the history and ongoing impacts of colonisation, social determinants of health (including racism), and kinship and other cultural practices. Surprisingly, few of these programs have been evaluated to understand their impact on participants (Kerrigan et al., 2020; Rissel, Wilson, et al., 2022).

Internationally, systematic reviews of the effectiveness of First Nations cultural training on service or patient outcomes have been conducted (Clifford et al., 2015; Downing et al., 2011; Rissel, Liddle, et al., 2022), with some looking at specific health areas such as dental or diabetes care (Forsyth et al., 2017; Tremblay et al., 2020). However, relatively few papers were included in these reviews, and most studies that were included did not follow up participants. Positive outcomes identified included improvements to health professionals' knowledge, attitudes and confidence providing culturally safe care to First Nations patients, and patient satisfaction with and access to health care (Clifford et al., 2015; Rissel, Liddle, et al., 2022). More evidence of the effectiveness of cultural competence training is needed, particularly objectively measured changes in attitude to Aboriginal and/or Torres Strait Islander culture.

The aim of this study was to prospectively evaluate the impact of a Central Australian cultural awareness program for health care staff named the 'Introduction to Central Australian Cultures and Context' on a scale measuring participant attitudes regarding cultural safety, critical thinking and transformative unlearning.

Methods

Cultural Awareness Program Description

Alice Springs is the regional centre in Central Australia, the traditional lands of the Arrernte people, but as a central region it is a place where a diversity of Aboriginal language groups can be found. Flinders University provides 'Introduction to Central Australian Aboriginal Cultures and Context', which is a one-day (seven hour) program for students on clinical placements and new staff in the region. The aim of the program is to increase awareness of Aboriginal culture in the Central Australian region – there being few Torres Strait Islander people in Central Australia (Australian Bureau of Statistics, 2021) – and enhance attitudes to working with Aboriginal people. The curriculum was developed based on national recommendations (Cultural Safety Training Standards Committee, 2011) and consultations with local Traditional Owners. The program is facilitated by a respected Elder of the local Arrernte people. It includes a combination of brief lectures, small group activities, short films and reflective activities.

Design

The research design was a consecutive group pre-program, post-program and follow-up evaluation. Researchers used a mixed methods approach, collecting both quantitative and qualitative data. Participants completed the first part of a written questionnaire at the beginning of the program, then finished it at the conclusion of the program. If they agreed, participants were then asked to provide email contact details to allow a further on-line follow-up survey two months after the program and for this to be linked to their earlier data.

Outcome Measure

The primary outcome measure was an 11-item scale, which has been psychometrically assessed with good validity and reliability. The scale has a Cronbach's alpha of 0.73, test-retest kappa range of 0.66-0.78 and intraclass coefficient of 0.72 (Ryder et al., 2019). It measures attitudes towards three themes of cultural safety, critical thinking

and transformational unlearning (Ryder et al., 2019) (see Table 1). The scale was administered at each of the three time points. Open ended questions were asked at the end of the program, and also at the two-month follow-up, including “What things have you learned about Aboriginal culture that you can apply in your workplace?”.

Table 1

Attitude scale measuring cultural safety

Please indicate your agreement (or not) with the statements below.

	Strongly Disagree	Disagree	Neither A nor DA	Agree	Strongly Agree
I think my beliefs and attitudes are influenced by my culture					
A health professional's ability to communicate with patients is as important as his/her ability to solve clinical problems					
The presence of more than two family members in a hospitalised patient's room is disruptive to staff and roommates and should be prohibited					
The quality of patient/client care could possibly be compromised if a health professional is oblivious to the family's cultural attributes and values					
Aboriginal people, due to their own cultural beliefs and values, have the poorest health status in Australia					
Aboriginal people should take more individual responsibility for improving their own health					
The Western medical model is sufficient in meeting the health needs of all people including Aboriginal peoples					
All Australians need to understand Aboriginal history and culture					
Aboriginal people should not have to change their culture just to fit in					
We practice equity in the provision of healthcare by treating Aboriginal people the same as all other clients					
I have a social responsibility to work for changes in Aboriginal health					

Demographic data were also collected, including sex, age category (<25 years, 25-34 years, 35-44 years or 45+ years), professional work area (nursing, allied health, medical, other health profession, administrative, research or professional services, or other), time spent working in a remote health setting (never, <1 year, 1 to <5 years, 5 to <10 years, or 10

years+), and previous attendance at a face-to-face cultural awareness or cultural safety training course (yes/no/not sure).

Analysis

A score for the 11-item scale was calculated (five of the item scores are reversed), and a mean score calculated for pre-, post- and two-months following the program. A paired t-test was undertaken on linked scores, comparing baseline with post-program mean score, and baseline with follow-up mean scores. Unpaired t-tests were also calculated. Multiple regression analyses were conducted to test the association between baseline and post-intervention scores, by characteristics of participants. Due to a lower number of respondents, this was not carried out with the two-month follow-up scores.

Qualitative Data

The open-ended questions in the post program and follow-up questionnaires allowed participants to provide unprompted feedback on their experience of the training. Researchers used inductive thematic analysis (moving from specific observations to broader generalisations) to understand the richness of responses (Nowell et al., 2017). A research assistant initially coded the responses, with the themes iteratively refined in discussion with another researcher, both of whom were independent of the delivery of the programs. The Aboriginal Educator was not involved in the analysis of these data to allow a fresh perspective.

The research was ethically approved by the Central Australian Human Research Ethics Committee (HREC Reference Number: CA-20-3909).

Results

Quantitative Results

Overall, 123 people participated in 14 one day cultural awareness programs through 2021, and completed pre- and post-questionnaires. However, there were missing data at follow-up, with a low response rate (15%) and completion rate (58%) (see Table 2).

The proportion of respondents who reported that the course was relevant to their individual practice or workplace was very high, 97% post program and 94.7% at follow-up.

Table 2

Sample characteristics at baseline, post-program and at two-month follow-up

	Baseline	Post-program	Two-month follow-up
Overall number of attitude scale respondents	123	122	19
Sex	(n=122)	(n=114)	(n=11)
- Male	32	30	5
- Female	90	84	6
Age group	(n=123)	(n=115)	(n=11)
- <25 years	39	35	2
- 25-34 years	61	58	5
- 35-44 years	13	12	1
- 45+ years	10	10	3
Profession	(n=123)	(n=115)	
- Nursing	31	27	2
- Allied Health	32	31	1
- Medical	23	23	3
- Other health profession	14	12	3
- Other	23	22	2
Time in remote setting	(n=123)	(n=115)	(n=11)
- Never	67	61	5
- <1 year	35	34	3
- 1-5 years	11	10	1
- 5+ years	10	10	2
Previous cultural education	(n=123)	(n=115)	(n=11)
- Yes	57	56	5
- No/not sure	66	59	6

The Ryder attitude scale scores ranged from a possible 11 to 55. The mean scale score at baseline was 45.7 (95% confidence interval 44.8 – 46.7). At post-program it had increased to 47.3 (95% confidence interval 46.3 – 48.2), which was a statistically significant increase using both the paired ($p < 0.01$) and unpaired t-test ($p = < 0.03$). By the time of the two-month follow-up it had decreased to 42.2 (95% confidence interval 39.4 – 45.0). This was not statistically different from the baseline score with a paired ($n = 11$) t-test ($p = < 0.37$), however the difference was statistically significant with an unpaired t-test ($p = < 0.01$) which

included an additional eight respondents (n=19) whose records could not be matched with their baseline data. Regression analyses examining possible variations in changes in scale scores between baseline and post-program by demographic characteristics found no statistical associations.

Qualitative Results

The feedback from participants after the program and at follow-up was overwhelmingly positive. Four themes were identified: relationships, communication effects of colonisation and negative comments.

Theme: Relationships.

When asked what they had learned about Indigenous culture that could be applied in their workplace specific areas included family relationships, avoidance relationships, skin names and the kinship systems were consistently mentioned:

“Family relations and how to appropriately approach. What family members may be present.”

“Kinship systems are incredibly relevant and will be applied in my workplace.”

Theme: Communication.

Learning more culturally appropriate communication methods, such as avoiding direct eye contact, fewer questions, body language, tone during initial cultural exchanges and background sharing, was another benefit reported from the program:

“Tips and tricks of communication in different cultures; respectful communication.”

Theme: Effects of colonisation.

Some participants learned about the specifics of colonisation in Central Australia for the first time, and how this affected the current context, including intergenerational trauma:

“Colonisation, displacement of central Aboriginal people, how this history still plays out today and effects social determinants of health”

Although there was only a small number of participants who provided feedback at follow-up they were also very positive:

“More aware of the cultural differences, so show more empathy and understanding and see things differently. Best cultural teaching I have had in six years of medical school!”

Theme: Negative comments.

However, not everyone found it relevant to their work, with one pathologist commenting “In pathology, all bloods are the same” and another long-term NT resident writing “The course was pretty irrelevant for someone who has lived in the NT for over 40 years.”

Discussion

The results demonstrate a statistically significant improvement in attitudes towards Aboriginal and/or Torres Strait Islander culture after a one-day cultural education program. However, this appears to have not been maintained two months after the program, although the small follow-up sample makes this result inconclusive. Participants rated the course as very relevant to their work and the qualitative feedback was overwhelmingly positive.

Most evaluations of cultural awareness training are conducted with post-program only subjective feedback. It is a strength of this study that attitudes towards Aboriginal and/or Torres Strait Islander culture was objectively measured using a validated measure. The pre- and post-program response rates were high. The value of using a standardised scale at three time points is to calculate a quantitative measure of the degree of change in attitude over time. Researchers acknowledge that the shift of 1.6 points in the short term is small, but it was positive, as would be theoretically expected.

The short-term impact highlights that the program is effective in changing attitudes and knowledge in the short-term, and the results are consistent with the evaluation of other cultural awareness programs in the NT (Kerrigan et al., 2020). However, by itself, a single one-off program is unlikely to sustain an effect. Our results support the literature in that cultural training is an ongoing journey. It is common to see a decay in educational effect over time in many subject areas, with additional strategies needed to maintain these effects (Institute of Medicine, 2015). Such strategies would include ongoing cultural education,

management support of culturally responsive policies and practices with an organisation and proactive employment of Aboriginal and/or Torres Strait Islander peoples (Freeman et al., 2019; Kildea et al., 2018). An additional strategy could be following up cultural awareness training with further, in-depth cultural training such as cultural safety and or cultural responsiveness training.

The high baseline attitude scale score suggests that program participants already held quite positive Aboriginal and/or Torres Strait Islander cultural attitudes. This may reflect their willingness to work in Alice Springs, and to attend a cultural training program. The low response at follow-up is not uncommon in program participant research. Those who responded may be either motivated by positive or negative feelings about the program and given that some respondents said the program was not relevant to their work and others that were positive, we interpret this to mean that there was a representative spread of respondents.

Overall, participants reported that they highly valued learning aspects of Aboriginal and Torres Strait Islander culture, such as the kinship system, social norms and structures, and communication styles. For many new staff who have had minimal contact with Aboriginal and/or Torres Strait Islander people at least a minimum level of cultural awareness of the local area (i.e. cultural knowledge and communication) is crucial for effective healthcare. Providing a cultural awareness orientation to new staff should be expected of health care organisations in the NT (Northern Territory Government, 2016). Those respondents who expressed that they 'treat everyone the same' may not have appreciated that equity is about giving people what they need and that disadvantaged people do not start at the same level of privilege as others (Sherwood & Mohamed, 2020). Reporting that cultural awareness was not relevant may reflect an already high level of awareness, or more likely signals a failure to recognise another worldview different to their own (Shepherd et al., 2019).

Limitations

A one-day cultural education program can never cover all aspects of Aboriginal and/or Torres Strait Islander culture and practices. Cultural awareness is also limited in its ability to take participants to a higher level of understanding and practice change, which may be achieved through, for example, cultural safety and responsiveness training. Ongoing professional development and cultural mentoring are needed, particularly cultural training that moves beyond cultural awareness to cultural safety and responsiveness. The low follow-up response rate makes it impossible to draw conclusions about the medium-term impact on participant's professional practice.

Conclusion

A one-day cultural education program produced short-term positive changes in attitudes and was highly valued by participants. However, it is unclear if these changes are maintained in the medium-term. Further research is warranted to obtain a greater understanding of the impact of cultural education programs, including correlating attitude scale scores with culturally safe healthcare practice, qualitative interviews with program participants about their subsequent experiences in the workplace, and interviews with Aboriginal and/or Torres Strait Islander patients about their perspective of cultural safety.

References

- Australian Bureau of Statistics. (2021). *Aboriginal and Torres Strait Islander people: Census Information on Aboriginal and Torres Strait Islander peoples including language and ancestry*. Retrieved 10/08/2022 from <https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-peoples/aboriginal-and-torres-strait-islander-people-census/2021>
- Clifford, A., McCalman, J., Bainbridge, R., & Tsey, K. (2015). Interventions to improve cultural competency in health care for Indigenous peoples of Australia, New Zealand, Canada and the USA: A systematic review. *International Journal for Quality in Health Care*, 27(2), 89-98. <https://doi.org/https://dx.doi.org/10.1093/intqhc/mzv010>
- Cultural Safety Training Standards Committee. (2011). *Creating the NACCHO Cultural Safety Training Standards and Assessment Process - A background paper*. <http://www.csheita.org.au/wp-content/uploads/2015/11/CSTStandardsBackgroundPaper-NACCHO.pdf>
- Downing, R., Kowal, E., & Paradies, Y. (2011). Indigenous cultural training for health workers in Australia. *International Journal for Quality in Health Care*, 23(3), 247-257. <https://doi.org/10.1093/intqhc/mzr008>
- Forsyth, C. J., Irving, M. J., Tennant, M., Short, S. D., & Gilroy, J. A. (2017). Teaching Cultural Competence in Dental Education: A Systematic Review and Exploration of Implications for Indigenous Populations in Australia. *Journal of Dental Education*, 81(8), 956-968. <https://doi.org/https://dx.doi.org/10.21815/JDE.017.049>
- Freeman, T., Baum, F., Mackean, T., Ziersch, A., Sherwood, J., Edwards, T., & Boffa, J. (2019, Dec). Case study of a decolonising Aboriginal community controlled comprehensive primary health care response to alcohol-related harm. *Australian & New Zealand Journal of Public Health*, 43(6), 532-537. <https://doi.org/10.1111/17536405.12938>

- Horvat, L., Horey, D., Romios, P., & Kis-Rigo, J. (2014). Cultural competence education for health professionals. *Cochrane Database of Systematic Reviews* (5).
<https://doi.org/10.1002/14651858.CD009405.pub2>
- Indigenous Allied Health Australia. (2019). *Cultural safety through responsive health practice - policy position statement*. <http://iaha.com.au/wp-content/uploads/2019/08/Cultural-Safety-Through-Responsive-Health-Practice-Position-Statement.pdf>.
- Institute of Medicine. (2015). *Measuring the impact of interprofessional education on collaborative practice and patient outcomes*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/21726>
- Kerrigan, V., Lewis, N., Cass, A., Hefler, M., & Ralph, A. P. (2020). "How can I do more?" Cultural awareness training for hospital-based healthcare providers working with high Aboriginal caseload. *BMC Medical Education*, 20(1), 173.
<https://doi.org/10.1186/s12909-020-02086-5>
- Kildea, S., Hickey, S., Nelson, C., Currie, J., Carson, A., Reynolds, M., Wilson, K., Kruske, S., Passey, M., Roe, Y., West, R., Clifford, A., Kosiak, M., Watego, S., & Tracy, S. (2018). Birthing on Country (in Our Community): A case study of engaging stakeholders and developing a best-practice Indigenous maternity service in an urban setting. *Australian Health Review*, 42(2), 230-238.
<https://doi.org/https://dx.doi.org/10.1071/AH16218>
- Li, S. Q., Pircher, S., Guthridge, S., Condon, J., & Wright, A. (2011). *Hospital Admissions in the Northern Territory 1976 to 2008*. Northern Territory: Department of Health.
- National Faculty of Aboriginal and Torres Strait Islander Health. (2022). *Cultural awareness education and cultural safety training*.
<https://www.racgp.org.au/download/Documents/AHU/cabooklet.pdf>

- Northern Territory Government. (2016). *Aboriginal languages in the Northern Territory*.
[https://nt.gov.au/community/interpreting-and-translating-services/aboriginal-
interpreter-service/aboriginal-languages-in-nt](https://nt.gov.au/community/interpreting-and-translating-services/aboriginal-interpreter-service/aboriginal-languages-in-nt).
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13. <https://doi.org/10.1177/1609406917733847>
- Rissel, C., Liddle, L., Ryder, C., Wilson, A., Richards, B., & Bower, M. (2022). Improving cultural competence of healthcare workers in First Nations communities: A narrative review of implemented educational interventions 2015-2020. *Australian Journal of Primary Health*. <https://doi.org/10.1071/PY22020>
- Rissel, C., Wilson, A., Richards, B., Ryder, C., & Bower, M. (2022). Process evaluation of a Central Australian Aboriginal Cultural Awareness and Safety Training program (2015-2020) for health professionals and students *Focus on Health Professional Education: A Multi-Professional Journal*, 23(2), 51-59.
<https://search.informit.org/doi/10.3316/informit.537313324609031>
- Ryder, C., Mackean, T., Ullah, S., Burton, H., Halls, H., McDermott, D., & Edmondson, W. (2019). Development and validation of a questionnaire to measure attitude change in health professionals after completion of an Aboriginal health and cultural safety training programme. *The Australian Journal of Indigenous Education*, 48(1), 24-38.
[doi:10.1017/jie.2017.37](https://doi.org/10.1017/jie.2017.37)
- Shepherd, S. M., Willis-Esqueda, C., Newton, D., Sivasubramaniam, D., & Paradies, Y. (2019, 2019/02/26). The challenge of cultural competence in the workplace: Perspectives of healthcare providers. *BMC Health Services Research*, 19(1), 135.
<https://doi.org/10.1186/s12913-019-3959-7>
- Sherwood, J. (2021). *What is cultural competence?*. (2021).
<https://www.sydney.edu.au/nccc/about-us/what-is-cultural-competence.html>

Sherwood, J., & Mohamed, J. (2020). Racism a Social Determinant of Indigenous Health:

Yarning About Cultural Safety and Cultural Competence Strategies to Improve

Indigenous Health. In J. Frawley, G. Russell, & J. Sherwood (Eds.), *Cultural*

Competence and the Higher Education Sector: Australian Perspectives, Policies and

Practice (pp. 159-174). Springer Singapore. [https://doi.org/10.1007/978-981-15-](https://doi.org/10.1007/978-981-15-5362-2_9)

[5362-2_9](https://doi.org/10.1007/978-981-15-5362-2_9)

Tremblay, M.-C., Graham, J., Porgo, T. V., Dogba, M. J., Paquette, J.-S., Careau, E., &

Witteman, H. O. (2020). Improving cultural safety of diabetes care in Indigenous

populations of Canada, Australia, New Zealand and the United States: A systematic

rapid review. *Canadian Journal of Diabetes*, *44*(7), 670-678.

<https://doi.org/10.1016/j.jcjd.2019.11.006>