



Aboriginal employment outcomes at Argyle Diamond Mine: What constitutes success, and for whom?

Joni Parmenter^{a,*}, Kia Dowell^b, Sarah Holcombe^a, Rowena Alexander^c

^a Centre for Social Responsibility in Mining (CSRMI), Sustainable Minerals Institute (SMI), The University of Queensland (UQ), Brisbane, QLD, 4072, Australia

^b Gulganyem Trust, 19 Chestnut Avenue, Kununurra, 6743, Western Australia, Australia

^c Communities and Social Performance, Rio Tinto, 152-158, Georges Terrace, Perth, Western Australia, 6000, Australia

ABSTRACT

Indigenous participation in the Australian mining workforce has rapidly increased over the last 15 years, yet little is known about what outcomes have been achieved for those employed. Using a case study of Rio Tinto's Argyle Diamond Mine in the Kimberley region of Western Australia, this paper begins to explore the extent to which Aboriginal people succeeded in achieving, as articulated in the Indigenous land use agreement, "good careers at the same time as following their culture" (MPA, 2004:101). To consider this issue, we draw on elements of the Yap and Yu (2016, 2016a) Yawuru wellbeing indicators, on the basis that the structures and indicators of wellbeing followed by the Traditional Owners associated with the agreement have not been recorded in the wellbeing scholarship. With the mine closed in late 2020 after almost 40 years, the question of what outcomes Aboriginal employees have achieved is a critical one to consider. Although disaggregating the effects of mining employment from other aspects of the benefit stream within the agreement is not straightforward, a focus on the experiences of those Aboriginal employees at Argyle provides a corrective to the lack of empirical research over the last decade.

1. Introduction

There has been a substantial increase in the number of Indigenous¹ peoples working in the Australian mining industry over the last couple of decades. This success is typically measured by industry using quantitative indicators, primarily number of employees. That is, the more Indigenous employees; the better, and the less staff turnover; the better. Less consideration is given to understanding what constitutes a positive outcome from mining employment for these Indigenous employees, whose orientations towards work and employment may differ to that of mainstream (Altman, 2010; Austin-Broos, 2003; Curchin, 2013; Peterson, 1993, 2005; Peterson and Taylor, 2003; Povinelli, 1993, 1995; Trigger, 2005). In recognition of these different culturally derived value systems, there have been attempts to establish qualitative and subjective locally derived measures of wellbeing (Yap and Yu, 2016, 2016a; Jones et al., 2018).

There is a small but growing body of research in relation to the outcomes for the Indigenous individuals who have taken up employment opportunities at industrial scale mining operations globally that this paper aims to contribute. This includes recent research from Australia (Parmenter and Barnes, 2021; Parmenter and Drummond, 2022), Canada (Caron and Asselin, 2020; Caron et al., 2020; Guimond and Desmeules, 2018; Hall, 2022), New Caledonia (Mazer et al., 2022) and the USA's state of Alaska (Berman et al., 2020). Berman and co-authors, for instance, found that while the Red Dog mine in Alaska provided significant benefits to Indigenous peoples,² most of the mine workers were hired from outside of the region. Their case study also found that employment at Red Dog was associated with a small increase in the likelihood of Indigenous employees leaving the local area,³ thus increased mobility.

Using the case study of Rio Tinto's Argyle Diamond Mine⁴ (hereafter "Argyle") in the East Kimberley region of Western Australia (WA), this

* Corresponding author. Centre for Social Responsibility in Mining (CSRMI), Sustainable Minerals Institute (SMI), The University of Queensland (UQ), The University of QLD, Brisbane, QLD, 4072, Australia.

E-mail address: Joni.Parmenter@uq.edu.au (J. Parmenter).

¹ There are two distinct Indigenous groups in Australia—the Melanesian peoples of the Torres Strait Islands and the Aboriginal peoples of the mainland. We use the term 'Aboriginal' when referring to the Argyle Diamond Mine or the source refers to this term, and 'Indigenous' to refer to both Aboriginal and Torres Strait Islanders across Australia, where the source refers to this term or when referring to Indigenous peoples globally.

² Native Alaskans with historical ties to the region.

³ The Northwest Arctic Borough (NWAB).

⁴ The mine takes its name from Lake Argyle, created in 1972 with the damming of the Ord River and the subsequent inundation of the Argyle pastoral lease (Doohan, 2006:1).

paper explores the extent to which Aboriginal people have benefited from employment at the mine. We consider whether Aboriginal people have achieved their aspiration articulated in the land use agreement of having “good careers at the same time as following their culture”. The Argyle Participation Agreement was signed in 2005. Given the mine ceased operations in late 2020, it is timely to consider what benefits employment has provided to Aboriginal people and consider how any of these benefits may translate post-closure.

Argyle has been considered one of the leading Australian mines for Aboriginal employment (Brereton and Parmenter, 2008). According to Markham and White (2013), drawing from the 2011 census and other data, the Argyle mine was fifth out of 20 major mines (in which the authors also include the major Pilbara mining region) in terms of Aboriginal employees as a percentage of the mine’s total workforce. It is important at this point, to make the distinction that Aboriginal employees as a cohort are not the same as Traditional Owners (TOs). TOs are local Aboriginal people who have customary rights to land in the Argyle Participation Agreement Area. It is a term variously used across Australia and derives from the legal term ‘traditional Aboriginal owners’ under the *Aboriginal Land Rights (NT) Act 1976*, which defined these Aboriginal people as those with common spiritual affiliation to sites on an area of land that hold primary spiritual responsibilities for those sites and that land (colloquially shortened to ‘TOs’). A ‘Local Aboriginal Person’ is defined in the agreement as ‘Any Aboriginal person living in the East Kimberley Region (EKR).’⁵ The agreement makes a distinction between local Aboriginal people and Traditional Owners, with a clear focus on prioritising the latter for training and jobs at Argyle. This study largely conflates these two groups, with TOs representing around half of the participants in study. We chose to conflate the findings because the themes were similar for both groups. Quotes from participants in this paper have been identified as a TO or a local Aboriginal person.

The paper is a result of a collaboration between two non-Indigenous researchers, Joni Parmenter and Sarah Holcombe, and two Aboriginal women, Kia Dowell and Rowena Alexander. Both non-Indigenous researchers are employed by The University of Queensland. Kia Dowell is a Traditional Owner of the Argyle lease and Rowena Alexander is a local Aboriginal woman from the East Kimberley Region who was employed by Rio Tinto Argyle Diamond Mine at the time of the research and assisted Parmenter with the research.

The first part of the article introduces the Argyle case and presents company employment data, beginning with an overview of the methodology. The second part of the article draws on Argyle Aboriginal workforce surveys conducted by Parmenter and Alexander in 2020, (just prior to closure) and begins to explore this issue of outcomes, as this translates beyond an employment statistic for those living the experience.

2. Conceptual framework

This paper begins to explore the extent to which Aboriginal people, as articulated in Argyle agreement are “having a good career at the same time as following culture”. A significant limitation to addressing our key question, however, is that we do not know specifically what Argyle Traditional Owners meant when they referred to the concept of “culture” in the agreement.

There is no universally accepted definition of the term ‘culture’ or consensus on the nature of culture. In some cases, the use of the concept of culture has even been rejected by anthropologists (Abu-Lughod, 2008; Wikan, 1999). The contestation around the concept and the

⁵ The EKR is defined as including the eastern half of the Shire of Wyndham and East Kimberley (including the western side of Cambridge Gulf) and the northern part of the Shire of Halls Creek, including the township of Halls Creek and the communities along the Great Northern Highway to the west’ (Management Plan Agreement MPA, 2004:109).

different modes of articulation presents an obvious problem for how references to ‘culture’ should be understood. Anthropologist Edward Tylor is cited as providing the first definition of the term ‘culture’ as ‘that complex whole which includes knowledge, belief, art, morals, laws, custom and any other capabilities and habits acquired by man as a member of society’ (Tylor, 1871:1). This understanding of societies as culturally homogenous and static has since been challenged through processes of globalisation or ‘creolization’, a process that refers to the ‘cross-fertilization between different cultures as they interact’ (Cohen, 2007:85). Representing culture as static and as a unified entity can add to stereotypical thinking and ignore the diversity that exists amongst Indigenous peoples in Australia. We recognise that Indigenous peoples now live in intercultural worlds, where their lives are intertwined and enmeshed with the machinery of the state and engagement with the wider society (Merlan, 1998; Hinkson and Smith, 2005).

A definition of culture was not specified in any agreement clauses, and clearly there is no generally accepted definition or consensus of the culture concept. It could be expected, however, that an anthropological understanding of this concept may differ from a local Aboriginal explanation of their “culture” to outsiders (see Da Cunha, 2009). A study that examined the concepts of authenticity in tourism in the East Kimberley (Lane and Waitt, 2001) sheds some light on what TOs may have been referring to when they used the term “culture” in the Argyle agreement.⁶ Aboriginal people raised concerns about the impact of tourism on culture, citing the importance of continued access to Country: access to and the protection of sacred sites, and concerns that their language would be used inappropriately by tourists. A similar but more detailed statement was made by TOs in the Gulf Communities Agreement (GCA) in relation to the Century Zinc mine in Queensland:

to ensure that the material benefits do not corrupt indigenous cultures but enable people to re-affirm the cultures and enhance the lifestyles of the members of the Native Title Groups and other members of the Communities through community and cultural development initiatives (Gulf Communities Agreement, 1997:5).

Culture is also a political construct. As has been shown in many different settings, cultural identity can be consciously constructed and negotiated as a political and economic lever (Trigger, 1997; Bruner, 2005). Indigenous land claims under the Native Title Act and most Australian state-based land rights regimes require that claimants prove they have a prior and continuing association with land (see also Trigger, 1997; Povinelli, 2002). This resonates with Dowell, Traditional Owner and co-author of this paper. According to Dowell, references to culture during agreement negotiations were largely around cultural authority i. e., who had the right to speak for that Country. And there has been recent reflection by some TOs that, at the time of the Argyle negotiation, there was far from unanimous agreement with or understanding about how all seven groups listed in the agreement were connected to Country.

For Alexander, local Aboriginal woman and paper co-author, the idea of what “practising culture” means can vary not only from one family or language group, but from one individual to the next. Some will say that if you can’t speak your own traditional language, then it is not possible to practice culture. For others, being on Country, knowing that Country as place, fishing, hunting and practising kinship systems are forms of practising culture. In broad terms, “culture” is a subjective concept – as it is embodied through practices and norms, and it is a means of articulating with the world and asserting identity.

Employment outcomes in the mining sector are typically framed around economic benefit, occupational health and safety, notions of an individuals’ human capital and associated employee mobility. However, in the context of Indigenous peoples, customary land attachment, including on-going connection to place and associated rights and

⁶ Of note, this was developed around the same time as the Argyle Participation Agreement was being negotiated.

responsibilities, familial connections must also be considered (Altman and Martin, 2009; Martin et al., 2014; Scambary, 2009, 2013). A rebalancing of these concepts pushes us to consider that successful outcomes for Indigenous mine workers may be grounded in something else.

2.1. Framing “good careers” and “following culture”

This paper draws on two key sources to frame “good careers” and “following culture”. The first of these is recent research by Yap and Yu that established locally derived indicators and measures of wellbeing, for the Yawuru people from the neighbouring Broome region (2016; 2016a). The aim of these indicators was to counter mainstream measures of socio-economic standards which frame Indigenous outcomes in comparative deficit terms by, instead, establishing wellbeing metrics that allow for the measurement of issues crucial to Yawuru. Health and wellbeing for Indigenous peoples is a multidimensional concept, extending beyond the physical and material to include the social, emotional, cultural wellbeing of the community (NAHSWPN, 1989).

The Yap and Yu wellbeing metrics are grouped into eight themes which include family, identity and relatedness; community; connection to country; connection to culture; safety and respect; standard of living; rights and recognition; and health (2016a:325). These themes and potential indicators were then operationalised in Sen’s terms as “potential valuable functionings” – which, in the case of connection to Country, would include “looking after Country” and “eating bush tucker, eating fish that was caught in season and meat that was hunted in season” (Yap and Yu, 2016a:325). While we acknowledge these values are taken from the Yawuru in the neighbouring region, they resonate at a broader level with Gidja woman and co-author Dowell. The Yawuru wellbeing measures were chosen in the absence of any published indicators for Traditional Owners of the Argyle lease.

International literature on Indigenous models of wellbeing in the workplace includes Haar and Brougham’s (2013) research on career satisfaction and cultural wellbeing amongst the Maori in New Zealand, and Caron et al.’s (2019a) framework for promoting ‘insider status’ of Indigenous employees. As our scholarly lens in this paper is social anthropology, which also includes a collaborative approach to incorporating local Indigenous expertise within the article, we are taking a cautious approach to the behavioural workplace literature. Nevertheless, one of the findings in particular from the Māori research was the impact of the collectivist cultural predisposition on Māori work satisfaction, as this has parallels with our findings in relation to the cohort in relation to building cultural safety.

The primary measure of success of Indigenous employment adopted by industry and government are the raw numbers of Indigenous employees and the Indigenous proportion of the whole of workforce. While the collection of these statistics are important, for the Aboriginal workers in the data sourced for this paper, success referred to a suite of qualitative factors that can be further contextualised through Yap and Yu’s wellbeing measures (2016; 2016a).

The second key source we gain inspiration from is Holcombe and Kemp’s (2020) “enabling requirements and conducive conditions” for Indigenous mining employment to be considered local development. Argyle mine ceased production in late 2020, which brings into question if employment benefits continue post-closure. Some of the “conducive conditions” that Holcombe and Kemp articulate include a negotiated local agreement, compatible working conditions, core elements of free prior and informed consent (FPIC), staff mentoring and retention, and pre-employment programs. Underpinning these conditions is self-determination; that is, that the Indigenous customary landowners have control over employment engagement with mining companies. Holcombe and Kemp (2020) stress the importance of choice as a precondition of employment as development. This fundamentally includes Indigenous landowners providing their free prior and informed consent (FPIC) to mining on their land, and support for development in accordance with their own designs and aspirations (Anaya, 2015).

Both Yap and Yu (2016, 2016a) and Holcombe and Kemp (2020) are useful sources in providing conceptual scaffolding to determine what factors may be considered to contribute to the success or failure of employment outcomes at Argyle from an Aboriginal perspective. This paper does not seek to evaluate the extent to which the agreement commitments were implemented but does seek to explore the extent to which employment impacted the lives of Aboriginal people in terms of “having good careers while following culture”.

3. Methods and data

We draw on a range of published and unpublished source material including scholarly articles, and consultancy reports, including those prepared by the first named author. The primary source of data is derived from a survey of Aboriginal former and current Argyle employees undertaken in 2020 (Parmenter et al., 2020). Rio Tinto commissioned the Centre for Social Responsibility at The University of Queensland to undertake the survey in March 2020. This research was approved by The University of Queensland Human Research Ethics Committee. A similar survey, also by CSR researchers, was completed in 2007 (Sarker and Bonbongie, 2007) with the aim of assisting the company to understand their contribution to skill development in the region and inform their Aboriginal employment strategies.

In the 2020 survey which this paper draws on, a total of 56 Aboriginal people were invited to participate, with 37 completing the survey, representing a 66 percent response rate. Robson and McCartan (2016) suggest that most commentators consider a minimum response rate of 60 per cent as acceptable. Of the 37 who completed the survey, 21 were former employees and 16 were current employees. There were 21 male and 16 female respondents. TOs represented around half of respondents. Of these, 13 identified with the Gidja Traditional Owner group and three from the Miriwung group. The survey asked about the respondents’ demographic details, employment experience and working conditions at Argyle, skills learnt, and perceived impacts, both positive and negative, of working at the mine.

Participants were able to complete the survey independently using either a paper-based or online version. Another option was to complete the survey by telephone with an interviewer asking the questions. All but one participant chose the latter method. A preference to engage more directly via “yarning” and also talking, over other research methods (such as form filling) is not unusual in Indigenous settings (Bessarab and Ng’andu, 2010). The survey was administered by either the first author or the fourth author, (a local Aboriginal woman employed by Rio Tinto at Argyle who acted in a Research Assistant role).⁷ Parmenter outlined the research procedures to Alexander including gaining consent and maintaining anonymity of respondents.

3.1. Limitations

A range of limitations of the survey emerged and should be considered when interpreting results. Firstly, identifying the initial pool of participants was reliant on Rio Tinto having their current contact details. It is conceivable that hard-to-reach former employees had a different employment experience than those that make up the current sample. Further, it is possible that former employees who had a negative experience at Argyle were less likely to participate. As such, the survey results may overstate the extent to which people were positive about their employment experience.

The survey occurred during the COVID-19 pandemic. This may have discouraged people from participating given the disruption to their everyday lives during this period. It is also possible that the involvement of an existing Rio Tinto employee Alexander, in administering surveys

⁷ Rowena Alexander’s formal Rio Tinto job title at the time of writing was “Specialist, Communities and Social Performance”.

could have an influence on the findings. However, the authors consider the benefits of including a local Aboriginal person in the study outweighs this concern, notably as her role included community liaison. Through the guidance provided by Parmenter, as well as Alexander's prior experience assisting with research projects, on balance, the authors consider this limitation to be adequately addressed. Furthermore, as a local Aboriginal woman, Alexander's role as community member – and the associated commitments entailed – ensured that she maintained her independence from the company.

Another limitation was the absence of detailed longitudinal employment data provided by the company. While total Aboriginal employment numbers can be reported since 2005, it is not possible to disaggregate by gender, community of origin, or if they belong to a TO group which has an agreement with Rio Tinto.

We also recognise that the initial research questions were not targeted at all the issues that this paper engages with, as the focus of Rio Tinto in the original scope of work was to identify the company's contribution to human capital in the region. Nevertheless, the survey responses allow conclusions to be drawn to inform this paper.

4. Rio Tinto's Argyle Diamond Mine and East Kimberley Aboriginal people

4.1. A brief history of early contestation

Argyle mine is located in the remote East Kimberley region in the northeast of Western Australia, in close proximity to several Aboriginal communities and the township of Kununurra.⁸ The region has a population of around 14,000, of which almost half identify as Indigenous (ABS, 2021). The mine began operating in 1983 and ceased operations in late 2020. Argyle operated as both a fly in-fly-out (FIFO) and drive-in drive-out (DIDO) mine. Employees flew from towns and major cities in other Australian states or drove-in from multiple local communities. All employees lived on site during their roster, which may be up to 2 weeks at a time.

Argyle is located on the traditional Country of the Miriwung, Gidja, Malignin and Wularr people.⁹ Initially, there was significant opposition to diamond mining from local Aboriginal people (see Dixon and Dillon, 1990; Ryan and Catholic Education Office of Western Australia, 2001). The Argyle lease is located on a very significant cultural site for TOs. It is one of the resting places of the female Barramundi Dreaming ancestor. At that time, however, there was no legislative base to voice opposition. As a result, despite early opposition from local Aboriginal people, the highly contentious Glen Hill Agreement, (more commonly known as The Good Neighbour Agreement) was signed between five Aboriginal people connected to the area to be mined and two company representatives in 1980 (Christensen, 1990). Although agreements were a relatively new phenomenon at that time, Argyle attracted strong criticism for the way it negotiated the agreement (Christensen, 1990; Howitt, 1989; Dixon and Dillon, 1990; Langton, 1983). Many eligible Aboriginal people were left out of the negotiations, and those who did participate received limited assistance (Doohan, 2006). The agreement allowed for mining to

proceed on and adjacent to a significant number of sacred sites without further objection from TOs.¹⁰ In exchange, capital projects were to benefit Aboriginal people located at the Glen Hill outstation (later renamed Mandangala).¹¹ No employment provisions were included in this original agreement. However, there were company expectations that local Aboriginal people would take up employment opportunities at the mine (Doohan, 2006).

Even today, the *Native Title Act 1993* does not provide Indigenous landowners with a right to refuse mining on their land or the right to protect sacred sites, only a 'right to negotiate' with development interests (Mantzaris and Martin, 2000; McGrath, 2016). Further, as demonstrated by the recent high-profile destruction by Rio Tinto of a highly significant Aboriginal cultural site in the Pilbara (Juukan Gorge), cultural heritage legislation in Western Australia continues to be heavily weighted in favour of the resource industry over Indigenous interests (Ritter, 2003; Vaughan, 2016). This event caused international outrage, three senior Rio Tinto executives (including the CEO) lost their jobs, and a parliamentary inquiry into the incident (Australian Parliament, 2020).

4.2. Accommodation through the Argyle Participation Agreement (APA): Employment aspirations of Traditional Owners

The framework under which Rio Tinto more recently engage with Aboriginal people was established by the Argyle Participation Agreement (Argyle Participation Agreement APA, 2005) consisting of a registered Indigenous Land Use Agreement (ILUA) in April 2005 and a Management Plan Agreement (MPA) in 2004.¹² The process of negotiating the ILUA was the result of Argyle deciding to embark on a formal process of reconciliation with the Aboriginal people and communities and the Kimberley Land Council (Doohan, 2008:113).

The APA is one of few agreements available in the public domain. Much like the Good Neighbour Agreement, the APA allowed for mining activities to continue without objection from Aboriginal parties.¹³ The renewed agreement offered far greater beneficial provisions for Aboriginal parties, including the prospect of substantial Aboriginal employment. Argyle also committed to provide financial benefits to Aboriginal people by way of two financial trusts. One of the trusts was for charitable purposes, which funds law and culture, education and training and community development (Gelganyem), and the other is a discretionary trust (Kilkayi) which provides benefits for TOs of the agreement area. The MPA outlines a plan for Aboriginal sacred site protection, training and employment, cross-cultural training for mine employees and contractors, land access, land management, decommissioning of the mine, business development and contracting, and protection and access to an important cultural site, Devil Springs. The MPA is monitored by a relationship committee that consists of 26 TOs and four representatives from the mining company.

The MPA demonstrates the parties' shared aspiration to address socio-economic disadvantage by providing training and employment opportunities at the mine. A baseline of Aboriginal socio-economic indicators in this region of the East Kimberley undertaken immediately prior to the execution of the APA found the majority of the Aboriginal

⁸ Argyle's corporate history is complex, involving a number of joint ventures and mergers. Up until 2001, Argyle was owned by a Joint Venture (1976) between Kalumburu Joint Venture and CRA Exploration (CRAE), a subsidiary of CRA Ltd, which later became Rio Tinto. In 2002, Rio Tinto became the beneficial owners of Argyle and by 2004 the only joint venture partner was Argyle Diamonds Limited (Doohan, 2006:145).

⁹ Language groups are made up of a number of family groups (Dawang/Dawaam) and include, the Balabur, Bilbildjing, Mandangala, Neminuwarlin, Tiltuwam, Dundun (now Upper Jimbila) and Yunurr people, who are signatories to the Argyle Participation Agreement (2005).

¹⁰ Sites listed were: Barramundi Hole, Kilkaynim/Kunumburuntj, Devil Spring and Canteen Hole.

¹¹ Outstations, also referred to as homelands, are small, dispersed settlements usually located on the Country of the Traditional Owners. They provide the opportunity for an extended family group to return to Country and pursue a lifestyle that is closer to the customary economy.

¹² Co-signed by the following parties: Argyle Diamonds Ltd, and Argyle Diamond Mines Pty Limited, the Traditional Owners and Kimberley Land Council Aboriginal Corporation.

¹³ These so called 'gag clauses' were found to be inequitable (Australian Parliament, 2020). They provide certainly for mining companies but serious limitations for Indigenous peoples if they don't want the financial stream of the agreement compromised.

population were dependent on welfare, with little capacity to engage with the labour market (Taylor, 2004). This prompted both state and federal governments, Argyle and Aboriginal organisations to implement measures to improve the situation (Taylor, 2019). The MPA committed Argyle to several initiatives including preferencing TOs over others for training and employment opportunities. Clause 6.2 reads:

- If.
- (a) A TO applies for an advertised employment opportunity at the Mine; and
 - (b) another person applies for the same advertised employment opportunity at the Mine; and
 - (c) Argyle is of the opinion that the TO meets all of the essential and desirable criteria for the employment opportunity; then
 - (d) Argyle will employ the TO in preference to the other applicant (MPA, 2004:104–105).

A similar clause also preferences any TO who has successfully completed training under Argyle's Aboriginal Training Program. Likewise, similar clauses exist in other land use agreements between mining companies and Indigenous people in Australia signed by Rio Tinto (Martin et al. 2014). The aim is to ensure those whose land is being mined benefit from employment opportunities. Agreement clauses that favour TOs over other Aboriginal people for employment opportunities would appear warranted in Argyle's case, as only a third of the Aboriginal workforce in 2019 were TOs (Parmenter et al., 2020). As indicated earlier, no data on the numbers of TOs for previous years was provided by the company who cited issues with its reliability. This is very poor internal reporting, given the commitments to employ TOs contained in the MPA. A separate, but related issue is the absence of baseline data for TOs (as opposed to all local Aboriginal people) making it impossible to track progress for this cohort.

Under the agreement, TOs have a responsibility to promote and support jobs at Argyle within their communities, including supporting school attendance for young people and completion of High School. Indeed, this principle of mutual responsibility is articulated within the agreement (MPA, 2004:102). Importantly, Argyle recognised that Aboriginal people want "good careers at the same time as following their culture" (MPA, 2004:101) and Argyle recognised that TOs have commitments to cultural obligations that require flexible work arrangements. Argyle aimed to have local Aboriginal people comprising 40% of their total workforce by the time underground operations commence, anticipated to be in 2008 at that time. This goal was, however, well above the highest number ever reached during operations. Aboriginal employment peaked just after the new agreement in 2005, when there were over 200 Aboriginal employees working at the mine, representing 25 percent of the total workforce (Parmenter et al., 2020). Available data suggests many of these employees were local Aboriginal people (but not necessarily TOs). A workforce survey conducted in 2001 determined that 71 percent of Aboriginal employees were locally sourced from the East Kimberley region, and by 2003, this number had risen to 95 percent (Taylor, 2004:34). Most recent data obtained in 2019 indicated that all 68 (13.2%) of Aboriginal workers were defined as local, and one third were TOs (Parmenter et al., 2020).

In order to assess the direct impact of Argyle mine on regional Aboriginal employment outcomes, Taylor (2019) expressed the Argyle figures as a percentage of Aboriginal mainstream employment at each census year over a 15-year period.¹⁴ Taylor's calculations indicate that employment at Argyle accounted for 10 per cent of mainstream Aboriginal employment in the Kimberley region in 2001, sharply increasing to more than 25 per cent in 2006. It reverted back to around 10 per cent following the global financial crisis (GFC) in 2011, reducing

further to under 5 per cent in 2016 as the mine commenced underground operations.

5. Aboriginal perspectives on Argyle employment outcomes

For the Yawuru people in the neighbouring region, self-determination, strong connectedness to family, community and Country (tied together by language) were central to good health (Yap and Yu, 2016). Having a basic standard of living was also considered important to wellbeing. When asked 'what was the most pressing issue for you and your community?' the most frequent response for Yawuru men and women across all ages was lack of jobs (Yap and Yu, 2016:55). These values, and the conducive development conditions in the Holcombe and Kemp schema (2020) are now reflected in relation to the employment experience of Aboriginal workers at Argyle, based on a survey of both former and current Aboriginal employees (Parmenter et al., 2020).

It is important to note that senior TOs (Elders) are typically involved in agreement negotiations, and their aspirations may not necessarily align with those of the younger generation. However, as three quarters of survey participants in the study (Parmenter et al., 2020) used as a source for this paper were aged between 18 and 24 at the time of recruitment, one might conclude that some young people aspire to work at the mine. Survey data further supports the notion that younger people also want "good careers at the same time as following culture". Motivations for working at Argyle reported were to benefit the individual financially and with respect to pursuing a career (having good careers) but were also motivated by benefiting family and the broader community (following culture). Many also said they wanted to be a role model for young Aboriginal people in their community. As one participant explained:

The welfare lifestyle [living off social security] is quite prevalent in the East Kimberley. There's just other avenues and a better way of life that are better for everyone. It's given my family a positive outlook to see what I can do and how I went about it. [Former employee and Traditional Owner]

Working at Argyle created a sense of pride amongst employees and their families, and their employment had influenced others to seek employment at Argyle or elsewhere in their local town or community. On the other hand, some participants felt that working at the mine, as well as the associated trust, had brought their family difficulties. Co-author Alexander has seen both TOs and local Aboriginal people leave the business due to the immediate and extended families' demands on them to provide financial support. Attending funerals and other cultural and family events has also caused considerable pressure, particularly when some Argyle leaders did not understand the complexities behind these challenges for Aboriginal employees. These issues are expanded on below under three main themes emerging from the survey data.

5.1. Connection to Country and well-being

For the Gidga and Jaru peoples of the East Kimberley region, physical and mental health are connected to the health and wellbeing of Country and the cosmos. "I've got good wind blowing" translates as "I am alive and well" (McDonald, 2006:87). The body's life force comes from water and draws wind into the body, impacting both the body (e.g., moving blood around) and emotions (see McDonald, 2006:87). Given the connection Aboriginal people have to their land, one might conclude that mining and associated negative impacts on the environment, and the destruction of sacred places and sites, may make Aboriginal people unwell. This has been shown to be the case in other mines that are polluting and toxic – such as the Macarthur River lead and zinc mine in the Northern Territory (Kerins, 2018; Green and Kerins, 2021). However, even without obvious pollutants, the environmental damage that industrial scale mining can cause – especially in relation to sacred site destruction – can also have negative mental health and wellbeing effects

¹⁴ Census years 2001, 2006, 2011, 2016. Excludes Community Development Employment Program (CDEP).

(Lewis and Scambray, 2016). The survey asked if working at Argyle had a positive or negative effect on participants' connection to Country. Two thirds of survey respondents (67%) said their connection to Country and culture was impacted positively and 28 per cent were neutral. Respondents indicated that the income received from wages had enabled them to access Country via the purchase of cars, for example, the purchase of four-wheel drive vehicles to go out bush for hunting and fishing. These vehicles were also used by family when the employee was away from community, working at Argyle. For the Yawaru, over one third of survey participants were not able to access Country, with one of the main reasons due to access to transportation (Yap and Yu, 2016:67). However, they note that "looking after Country" was an important element of wellbeing. Some of the TOs in the Argyle study said they enjoyed working on their Country, being with family on site and speaking their language.

The "safety and respect" Yawaru wellbeing indicator (Yap and Yu, 2016) and Holcombe and Kemp (2020) "respectful relationships" enabling requirement was reflected in the *Manthe* welcoming ceremony at Argyle mine. Almost all survey respondents spoke of the importance of the *Manthe* welcoming ceremony. Since 2002, new mine workers (including Aboriginal workers) were required to attend a *Manthe* as part of their general induction. TOs operating from a place of cultural authority establish and maintained a very clear protocol. Families and individuals with the rights and practice to sing, dance and conduct the welcome of the *Manthe* were paid by Argyle to provide this service as part of the overall occupational health and safety induction program. The *Manthe* is particularly important given Argyle is located on a very significant cultural site for TOs. TOs used leaves dipped in water to brush participants down as a welcome and blessing to Country and burn green leaves to create smoke as a form of spiritual protection from the Barramundi Dreaming ancestor. Survey respondents explained that the ceremony made Aboriginal employees feel safe working at the mine. For Indigenous people from elsewhere in Australia, it was very important to be welcomed by the TOs in order to feel comfortable working there. All respondents said the ceremony demonstrates respect to Aboriginal landowners. Dowell is aware of female employees who have struggled with the idea of working on a mine site that is responsible for the complete physical destruction of the significant women's site by both open pit and underground mining methods. When the mine moved underground, a small number of women and men refused to work underground as they felt their respect for Country, culture, safety and beliefs were compromised and at risk.

The post-closure phase has presented limited opportunities for Aboriginal people to be involved in the restoration and rehabilitation of the mine. Following this study, a small number of Aboriginal people (6) have since completed a Certificate II in Conservation and Land Management and four remain employed in mine rehabilitation at the time of writing. Alexander explains the positive benefits: "Being able to report back to families regarding the status of sacred sites, rehabilitation and the wellbeing of other TOs on site is extremely important and is tied to cultural responsibilities for the Country". The diversity of employment opportunity, beyond only working in operations, is also understood as a conducive development condition in the Holcombe and Kemp schema (2020). Dowell notes that the Gelganyem Trust has advocated for a sustainable, long-term plan specifically regarding "future skills" since around 2017. To illustrate this point, Gelganyem fought to provide jobs and training through seed collection to the point where it was considered a social program. According to Dowell, in 2023, with independent expertise and advice, Gelganyem is working to change the industry perception about TOs knowledge of Country. There is still a significant amount of work and education about the technical and cultural

components of nature repair and healing Country. Gelganyem is a partner in the Healing Country initiative¹⁵ specifically looking to address these gaps and provide pathways in the transition of mining to caring for Country again.

In terms of physical health, Argyle survey respondents said there were both positive and negative impacts. Some gained weight due to the 'all you can eat' style buffets at the mine site, whereas others adopted a more physical regime whilst on site, utilising the fitness equipment provided. Argyle was an alcohol-free site at the time of this research. However, those who worked on site when the wet mess (bar) operated, noted that their alcohol intake increased while on site. Some reported their employment had facilitated more frequent access to health care (seeing a medical doctor for regular check-ups) and increased knowledge of healthy food from reading the healthy eating guides provided at the dry mess (food hall). It is important to note that most mine sites in Australia require employees to pass a 'fitness for work' medical examination prior to recruitment, so employees were arguably in reasonable health at recruitment.

5.2. Family, relatedness and respect

Family and relatedness are central to Aboriginal people's personhood and wellbeing. Family situates a person within a kinship structure of social and cultural exchanges that provide support, identity and belonging, to an individual (see especially Myers, 1986). The close interrelationship between personhood and identity – the ties that bind – may be especially strong in remote areas, and, as we discuss below, can create tensions in the socio-centric (rather than ego-centric) persons' ability to be their own agent. It has been noted that personhood and agency are deeply entwined (Wardlow, 2006; Holcombe, 2018). By this we mean the sort of agent a person can be is largely dependent on the social context and family expectations of behaviour: such that an individual's subjectivity is the basis of their agency. Every individual has a particular cultural and historical consciousness.

Given the importance placed on family, one might expect that Aboriginal people working at a mine away from their home community would be extremely difficult. In the case of Argyle, however, it appears the presence of many other local Aboriginal workers, at least during the period of 2005–2008, mitigated against feelings of loneliness experienced by FIFO workers. The source of support that most respondents reported was that from other Aboriginal employees (70%). A threshold number of Indigenous employees was suggested as a conducive condition for considering mining employment as a form of local development (Holcombe and Kemp, 2020).

Only 11 per cent of survey respondents reported to be unhappy with living away from home, and those on shorter rosters (e.g., seven days on site/seven days off site) found it easier than others to be away from family. A longer roster, where the number of workdays are considerably longer than the number of leave days (e.g., 14 days on site/seven days off site) found it more difficult to be away from family. Respondents indicated that the longer roster did not allow enough time at home to recover from night shift and spend time with family, before returning to work. Respondents acknowledged the longer roster was good for saving money but said it could negatively affect their health and wellbeing, family and social relationships. Dowell's perspective is that Argyle could have worked in partnership with TOs to develop alternate models to support the retention of TO employees. For example, allowing the workforce to drive to work daily (as opposed to staying overnight during their roster) and shorter shifts to enable time for the commute.

On the contrary, one woman said she was happy to be working away from home, because of the amount of "humbugging" (pressure to share

¹⁵ The Healing Country Initiative provides a structure for links scientific capacity with Indigenous businesses for ecological restoration led by Indigenous peoples, see <https://archealingcountry.com.au/>.

money and other resources) from her family and expressed a desire to be on site longer. Interestingly, a few Indigenous women who participated in an employee retention study at Rio Tinto's iron ore operations in the Pilbara region of Western Australia expressed similar sentiments (Parmenter and Barnes, 2020, see also Barnes et al., 2020). "Humbugging" was acknowledged as a major challenge for some employees in this study, and these family demands are common in Indigenous settings (Davies and Maru, 2010, Maru and Davies, 2011; Peterson, 1993, 2005). Having said that, all but one respondent reported that overall, income earned at Argyle had a positive impact on their life. The respondent giving a negative rating was unsure about the benefits of earning an income, saying "strain put on me with earning an income as family humbug me more and I find it hard to put my bills first". The majority felt they *could* decline requests for money from family, especially if it was for what they deemed to be non-essential use. The more family members who are employed, however, the less likely this conflict is felt by workers, as one participant explained, drawing on a well-known allegory:

Rather than give them the fish, I teach them how to fish, so that we all sit at the same table, all with the same amount of money. It is hard, but people get used to it. It can have a real negative impact and I've seen it in the past. 'You're bringing in a lot of money, why aren't you supporting the rest of the family?' But you know, if you're doing it, why isn't everyone else doing it? [working]. Eventually you get sick and tired of doing it. It is disheartening. You would think it would encourage more people to work, but it probably has the opposite effect. [Former employee and Traditional Owner]

Respondents purchased both depreciating assets (cars, boats) and a small number had invested in houses and units in major cities such as Perth and Darwin, as well as Rio Tinto shares. Others had engaged in philanthropy and financially supported community sports teams or cultural events, again aiming to benefit the broader community. The act of providing benefits for the wider community builds support and their power base in community and aligns with Yap and Yu's measure of wellbeing 'feeling respected and showing respect'. Respondents were proud to be able to support both immediate family or provide for themselves as a sole parent. Comments from respondents include:

The car really helped my family get in and out of town, and practice culture and stay on Country and be independent. [Former employee and TO]

I was able to support my parents and family and buy myself a new car, travel overseas and buy a house. [Former local Aboriginal employee]

It enabled me to buy cars and other things I wouldn't have dreamed of having. [I/We] Went on holidays and was able to jump in my car and go wherever I wanted to, whenever. [Former local Aboriginal employee]

This final statement, in particular, resonates with Sen's notion of the expansion of capabilities – through the expansion of choice (Sen, 1999).

Some of the respondents with a longer tenure at Argyle expressed regret that they had not gained sufficient financial knowledge at an earlier stage in their career. They suggested Argyle could have provided this advice earlier in their employment at the mine. This is a point of frustration for Dowell, who notes that the Gelganyem Trust has previously offered (to Rio Tinto) to investigate and facilitate a partnership with an organisation who could provide this service. We note that some mining companies do have pre-employment, or work-ready programs, that include financial literacy, which is highly valued as a social good outcome (Holcombe and Kemp's 2019:4) and one of Holcombe and Kemp's (2020) "enabling requirements".

Another challenge reported by Alexander, has been Aboriginal employees' ability to maintain avoidance relationships (mother-in-law/son-in-law, for example) to ensure that the range of cultural protocols

are upheld when working in the same physical space as each other (Myers, 1986). Inadvertently breaching these protocols can have a negative impact for the employee when returning to their home community. Alexander has observed employees feeling pressure from their partners due to being away from home. During the period of peak Aboriginal employment, the mine site was seen as a very sociable environment. This has caused jealous behaviours from partners which have led to relationship problems and the employee resigning to return to unemployment to be with family. These issues are also prevalent amongst the non-Indigenous mining workforce (see Lahiri-Dutt, 2019; McPhedran and De Leo, 2014).

The focus here turns to the benefits of employment post-mining, in particular; has mining employment contributed to the social good and provided transferable skills beyond the mine, by providing the opportunity for mobility as well as supporting the capabilities within the regional population.

5.3. Career development and local benefit

The resource industry has long been criticised for not developing Indigenous employees into more senior roles (Tiplady and Barclay, 2007; Parmenter and Barnes, 2020; Gibson and Klinck, 2005). As previously indicated, detailed time series data disaggregated by job types for Argyle employees was not provided by Rio Tinto. However, data reported at two different time points indicates there has been some, albeit very small, development of Aboriginal workers into more skilled and senior roles. According to Dowell, no TOs progressed further than "Team Leader" role.

In 2004, almost half of the Aboriginal workforce occupied entry-level production jobs such as loading and hauling, compared to 28 per cent for the non-Indigenous workforce (Taylor, 2004:35). Most recent company data collected in 2019 reported that of the 68 current Aboriginal employees, one third were in loading and hauling positions, another third were apprentices or trainees, 17.6 per cent were tradespeople, and the remaining employees were spread across various roles such as administration (Parmenter et al., 2020). Less than six per cent of Aboriginal employees occupied supervisory positions and there was one Aboriginal employee in the role of superintendent.

Another factor to consider is whether the company employed Aboriginal people who are already skilled, or if they have been successful in growing the skill based and thus the employee pool in the region. This is one area where the company, with government support, has succeeded, with figures suggesting that there has been advances in developing the formal skill base and employability of local Aboriginal people. A pre-employment or 'work ready' program offered short-term fixed contracts for local Aboriginal people with a view of transitioning to full-time employment, typically a traineeship (Rio Tinto, 2017).¹⁶ The 24-week program consisted of on-the-job training that focused on work ethics, life skills, and numeracy and literacy. The program commenced in 2005 and by 2017, 137 individuals had participated (Rio Tinto, 2017:26). Since 2006, 67 local Aboriginal people, including 29 TOs, have completed traineeships at Argyle and 73, including 23 TOs, have completed an apprenticeship. The extent to which these numbers contribute to raising the economic status for Aboriginal people in the region was considered by Taylor (2019:156) who reported that in 2011 Aboriginal apprentices at Argyle accounted for as much as 40 per cent of all Aboriginal people in the region in an apprenticeship and 36 per cent in 2016. Traineeships at Argyle accounted for 9 per cent of the regional total in 2011, dropping to just 3 per cent in 2016 Taylor (2019:156).

¹⁶ Argyle traineeships run over an 18 month to two-year period, combining on the job training with paid employment that leads to a nationally recognised qualification. Once completed, trainees can move to direct employment with Argyle or a contractor, or progress to an apprenticeship. Trade areas of fitter and turner, boilermaker, electrician, mechanical, and plumbing are offered.

Survey results also indicate that the company has been successful in providing local Aboriginal people opportunities to enter and remain in mainstream employment. Former employees agreed that the skills they learned at Argyle helped them to find work, and all respondents reported that they had worked since leaving Argyle, including for other resource companies and service providers; government; community organisations; and the private sector. With respect to their current employment, 16 of the 21 former employees were employed, with half of these employed in the mining industry. Four former employees owned their own businesses and one respondent reported 'homemaker' as their occupation.

Another important question is whether newly skilled Aboriginal employees have remained in the region or if they have migrated elsewhere, taking their skills with them. The issue of leakage of benefits has been discussed in Alaska (Berman et al., 2020) and likely to impact one's ability to "follow culture". Employment at Argyle has facilitated movement of former employees out of the Kimberley region, with almost half (43%) of survey respondents now living in towns outside of the region. Of those who moved out of the region, just over half moved to take up employment elsewhere, mostly in the mining industry. The remaining respondents moved to major cities to seek access to better health services and education for themselves and their families. For example, one respondent moved to the state's capital city of Perth so his children could attend quality secondary education while living with the family. If the family were to stay in the East Kimberley, the children would be sent away from the community to attend boarding school in the city. This respondent aspired to return to the East Kimberley once the children complete their schooling.

Alexander's view is that many have migrated out of the region because there are no other industries that can match the salaries offered by Rio Tinto. This out-migration has obvious impacts on local benefits and is a neglected area of research in Aboriginal employment. It is unknown, for example, to what extent employees living elsewhere send money home to their families as a form of remittance. Several participants in this study who are now living away from the region reported that they continue to financially support family currently living in the East Kimberley.

All current employees at the time of this study were living in the region. Nearly one-third reported that they would like to get a job in their hometown or community when Argyle ceased operations. Other responses given by two or more respondents were: a job in another Rio Tinto mine (25%) (which would involve migrating to another region) and start own business (13%).

Other obligations and commitments contained within the APA may have contributed to indirect Aboriginal employment via preferential contracting of Aboriginal businesses. In 2018, Argyle contracted approximately 63 regional businesses for procuring goods and services for the mine operation. However, it is not known how many Aboriginal people were employed by these businesses (GHD, 2018). The establishment of the Gelganyem and Kilkayi trusts under the APA created employment opportunities that have arguably developed local capacity. There are of course, other benefits for TOs associated with agreements which are likely to impact locally, but it is beyond the scope of this paper to address this topic or disaggregate the impacts of the different benefit streams.

6. Summary and discussion

This research demonstrates that positive outcomes from mining employment from both an industry and Indigenous perspective can be achieved when the appropriate conditions are in place. Aboriginal employment at Argyle peaked over the period 2005–2008, the period directly following the signing of the agreement. Dowell's experience is that internal champions and decision makers within the company during this period made a significant positive impact compared to later personnel who didn't understand the agreement commitments or

obligations they were accountable for delivering. This indicates that while agreements can be linked to better Indigenous employment outcomes (Caron et al., 2019b; O'Faircheallaigh, 2021), it is important that commitments made in agreements are regularly monitored and evaluated. High turnover in the industry means that Aboriginal stakeholders are constantly charged with developing new relationships and highlighting agreement commitments to new staff.

A number of enablers identified in the literature have been highlighted in the previous sections. These include threshold numbers of Aboriginal employees ensuring a supportive environment, and that direct employment was just one of many benefits provided under the agreement. The positive impact of having a 'critical mass' of Aboriginal employees has also been found at other mining operations, attracting others to also work at the mine and reducing turnover (Caron et al., 2020; Haley and Fisher, 2016; Parmenter and Barnes, 2021). And this also finds parallels in the collectivist pattern found in successful Māori workplaces (Haar & Brougham, 2013).

The findings support the enabling requirements identified in the literature by Holcombe and Kemp (2020). For example, the 'work ready' program was successful in ensuring Aboriginal people with limited mainstream work experience were provided with a culturally safe opportunity to enter the workforce at Argyle, while these programs recognised the additional support this cohort required to access employment. Likewise, access to government funding to increase Aboriginal traineeships and apprenticeships at the mine supported this initiative. Program supervisors were Aboriginal, and employees were supported by other local Aboriginal people in the program. However, career progression was not well supported for Aboriginal employees, and though there were periods (2005–2008) when there were high levels of local Aboriginal employment and thus a supportive peer group – this was not during the majority of the mine operation.

Dowell's view is that more could have been done to progress its Aboriginal workforce, especially for TOs, given the employment commitments set out in the MPA. For example, the provision of formal mentoring and a buddy system for those new to the industry is likely to have been beneficial. The norms, behaviours and safety culture around the FIFO bubble of living on site, and the industry language, can be very intimidating when it's an Aboriginal person's first experience of mainstream employment and settling in support is crucial. Putting more of an emphasis on Aboriginal leadership and being open and transparent about career progression and promotion opportunities are also likely to have improved outcomes.

Alexander believes the events of Juukan Gorge has prompted the industry to be more pro-active in developing Aboriginal employees. Developing Aboriginal leadership is equally important to meeting Aboriginal employment targets, yet there were no targets set for career development at Argyle. Alexander also argues that a more transparent and open recruitment process is required. Far too often, people were awarded roles because of a relationship they have with the hiring lead (who is most often non-Indigenous) rather than preferencing Aboriginal people as per the agreement. Such favouritism was also reported by Aboriginal employees at Rio Tinto iron-ore operations (Parmenter and Barnes, 2021).

It remains unclear to what extent Argyle's recognition of TOs' commitments to cultural obligations that require flexible work arrangements was operationalised. Argyle's cultural leave policy enabled Aboriginal employees to attend to cultural obligations, but there was evidence of employee hesitance in requesting cultural leave due to negative perceptions held by the non-Indigenous workforce. This indicates that more work is required to challenge notions of fairness amongst the non-Indigenous workforce - a task made more difficult by very high turnover in the industry. While many mining companies now implement Aboriginal cultural awareness training, this initiative, if not carefully and reflectively managed can be problematic, sometimes reinforcing negative stereotypes (see Parmenter and Trigger, 2018). Beyond the training offered at Argyle, the impacts of the 'welcome'

(*Manthe*) ceremony, in particular, have been positive in intercultural terms by providing respectful recognition of the legitimacy of cultural attachment.

A key pre-condition for understanding local mining employment as a form of development is ensuring that one-kind of dependency – the welfare state, is not swapped for another – the mining economy. For our purposes (per Holcombe and Kemp, 2020), this also includes the singularity of employment in the operations side of mining. Ensuring a diverse range of employment opportunities are developed during the life of mine reduces this dependency (see Scambary, 2009). This is what the Indigenous owned Gulkula mine in the Northern Territory has aimed for with multiple streams of employment pathways for local TOs, including work in the nursery, seed propagation and rehabilitation (Gukula, 2023).

Mining employment facilitated movement outside of the region for almost half of the former employees in this study. This finding aligns with a study at Red Dog Mine in Alaska, where employment at the mine was associated with an increase in the likelihood of leaving the region (Berman et al., 2020). While increased mobility is perceived as a positive for some, others have argued that increased mobility of Indigenous workers from their home communities in Canada is a form of colonial dispossession (Hall and Pryce, 2023).

Effective Indigenous institutions are also crucial both during life-of-mine and during the (often) longer period of closure to ensure that new employment opportunities are created. According to Dowell, Gelganyem has been very proactive in securing contracts for TO businesses during the transition to closure, but no long-term certainty has been provided. Commitments regarding contracting and business opportunities for TOs are contained in the agreement. This is a legacy issue with very real and current implications in the context of transition to closure and restoration and rehabilitation (Bainton and Holcombe, 2018; Beckett and Keeling, 2019; Hall and Pryce, 2023). Now that the payments to TOs (in the form of royalties) committed within the agreement ceased when production ceased such support for employment opportunities and training will be important to buffer the dependency on the compensation and royalty monies, which Dowell refers to as “sit-down monies”.

7. Conclusion

This paper provides an exploration of whether the employment opportunities at the Argyle mine have achieved what TOs sought from the agreement– that is to have “a good career at the same time as following culture”. The findings indicate that despite some challenges, particularly regarding balancing the obligations to share income with family, the majority of Aboriginal employees were able to work at the mine and continue to participate in customary activities and maintain family connections. Though clearly gaining employment at Argyle mine was a core element of TO aspirations, as an exploratory paper, a concerted and specific focus on Aboriginal employee perspectives of positive outcomes as an ethnographic exercise would be required to be more definitive in the findings. A major limitation in determining Aboriginal employment outcomes at Argyle is the lack of detailed, disaggregated employment data over time. While the data drawn on includes both local Aboriginal people and TOs, further research is required that focuses more specifically on the experience and outcomes for a larger number of TOs, including post-closure employment opportunities. What the available data does indicate, is that companies need to consider Indigenous employment outcomes at all stages of mine-life and undertake regular monitoring and evaluation. Further, Indigenous customary landowners must have control over employment engagement with mining companies.

Author contributions

Joni Parmenter: Conceptualisation, methodology, investigation, writing original draft, data curation, funding acquisition.

Kia Dowell: Writing, review and editing.

Sarah Holcombe: Conceptualisation, writing, review and editing.

Rowena Alexander: Methodology, investigation, funding acquisition.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Fourth author Rowena Alexander was employed by Rio Tinto, the company involved in this research, at the time the study was undertaken. Second author, Kia Dowell, is the Chairperson of a financial trust set up by the mining agreement between Aboriginal Traditional Owners and Rio Tinto. In both cases, the lead author and researcher determined that including a local Aboriginal person and Traditional Owners in the writing of this paper outweighed any concern of bias.

Data availability

The data that has been used is confidential.

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