Measuring Cultural Diversity of Elite Participants in Selected Australian Sports

Michael Dove, OriginsInfo

Introduction

Australia has one of the most culturally diverse populations in the world and can rightly claim considerable success in creating a positive and successful multicultural society. Policy statements at all levels of government, irrespective of which major party is in power, promote the social and economic benefits of multiculturalism. Such statements are mirrored by the range of providers of support services for humanitarian settlers and economic migrants alike. Major employers similarly recognise the benefits to their organisations of diversity in the workplace.

The level of commitment to ensure ongoing success of multiculturalism and the spread of opportunity places Australia among the global leaders. Such success requires active engagement with newly arrived communities to encourage them to embrace all that Australian society has to offer – economically and socially.

Of course, sport plays an integral part to Australia's economic and social fabric, whether for participants, administrators or spectators. In terms of global competition, Australians regularly outperform countries with significantly larger populations. Over the past decade or so, peak sporting bodies and clubs have done much to promote inclusivity and remove barriers to participation, especially for the young.

So, how well do these sports reflect Australia's cultural diversity at the elite level? Are some sports more attractive to some cultural segments? Across all sports, which cultural groups are consistently under and over-represented? Are there role models to inspire younger members from culturally diverse backgrounds? Is there evidence that the multicultural programs in popular sports are working?

After discussing the challenges of defining, collecting and analysing cultural data, this paper seeks to answer those questions and provide a comparison with a similar paper produced in early 2007¹.

What do we mean by "Culture"?

Culture is an elusive concept. This is because a satisfactory definition should reflect multiple dimensions. Cultural groups can be defined by people sharing a language, a religion, or an ethnic or geographic origin. Even more broadly, it may embrace common customs, tastes in food, drink, music or the arts, or through participation in a set of rituals and events.

¹ Cultural Diversity in Selected Australian Sports – see http://www.originsinfo.com.au/assets/Uploads/Documents/CulturalDiversityinSelectedAustralianSports.pdf



The Australian Bureau of Statistics (ABS) uses indicators of cultural background that are generally simple to measure - 'Country of Birth', 'Language Spoken at Home', 'Religion' and 'Ancestry'.

Ancestry is the closest of these indicators to reflect a multi-dimensional interpretation of culture but the ABS is less confident with the data it collects about Ancestry. This partly reflects the difficulties that many people have in defining their ancestry, and partly the methodological issues associated with creating the question and interpreting responses. For example, what does it mean if, as with 26.8% of 2011 census responses, a person declares their ancestry as Australian? And would a person of indigenous background agree with their claim?

While the option is available to declare two ancestries (23.1% of census respondents choose to do so), equal weighting is given to each of the first and second responses. A non-response rate of 6.9% further suggests the difficulty that many respondents have in dealing with this question. Clearly, many individuals self-identify with multiple ancestries in Australia – often reflecting their own diverse cultural and linguistic heritage.

While the cultural indicators reported in the census data are very valuable as a reference base for the whole or part of Australia, there is great difficulty in assigning the same classification to individuals in a list. The only semi-practical way to achieve a true comparison between the list population and the wider population is to collect data through forms or surveys.

Collecting Data on Cultural Background

However, organisations that choose to collect cultural diversity data in this way enmesh themselves in the difficulties of framing the questions, collating and classifying responses, and analysing and reporting in a statistically meaningful way. The fact that response rates to forms and surveys of this kind rarely reach 50 percent means that the data is likely to be unrepresentative, of untested quality, and of limited benefit.

Most organisations do not collect data about cultural background, largely because they have insufficient reason to do so. As suggested above, collecting such data through forms and surveys invariably produces poor quality information and low response rates — even when the question is well constructed and the data is designed so it can be readily classified and analysed. And few organisations are operationally set up to categorise and analyse the data in ways that maximise the value of having collected it in the first place.

In terms of customer engagement, requesting such data from an individual may damage the relationship between the individual and the organisation, largely because the request is seen as intrusive or the purpose is not transparent or sufficiently compelling.

Moreover, the Australian Privacy Principles (APPs), embedded within the recently amended Privacy Act, details whether and how 'personal information' should be collected and managed². The APPs are also clear about the definition of 'sensitive' information which includes information about an

² http://www.oaic.gov.au/privacy/privacy-act/the-privacy-act



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individual's "racial or ethnic origin". A higher standard of management applies to 'sensitive information', and non-compliance runs the risk of incurring significant penalties.

Much of this is unfortunate because data on cultural background, when appropriately used, provides an evidence-base and invaluable insight into how well an organisation reflects Australia's culturally and linguistically diverse (CALD) communities. Such evidence informs management and government with priority areas for attention where the goal is to maximise advantages of inclusivity – for organisations, individuals, CALD communities and wider society.

In many respects, collecting data on cultural background is as valuable as collecting data on an individual's gender, socio-economic background (for example, geodemographic classifications such as Mosaic), or their likely behaviour (through psychographic/'behaviourgraphic' tools such as those promoted by Experian or Roy Morgan Research). The use of such data is long established in mature economies and reflects a responsible, intelligent use of data to promote efficient, relevant and timely insight and communications.

Cultural background, through culturally-aligned needs, values and preferences, is clearly a key factor in consumer decisions and purchase behaviour. And for many cultures, differential needs and behaviours persist long after the migration event, and often, for multiple generations.

Unfortunately, for most organisations the expense and logistics of collecting good quality data through application forms and surveys make it difficult to cost-justify the effort.

Using Names as a Surrogate for Cultural Background

It is now generally accepted that a well-developed name recognition tool can provide a highly efficient and remarkably accurate view of the cultural diversity to be found within a list of individuals.

Where such a tool also incorporates a nationally coded view of cultural diversity produced from the same methodology, it makes it possible to easily and cost-effectively compare like with like and assess how well the list of individuals reflects the 'market' from which the individuals are drawn.

Name recognition offers a standardised, objective and valid alternative. For most of us, the names we carry are one manifestation of the cultural identity that our parents wished to bestow upon us. The number of instances where females change their name through a cross-cultural marriage and consequently generate an incorrect allocation (or 'false positive') are relatively few. And, in population-wide analysis, 'errors' that compensate tend to further diminish the impact of these false positives.

Furthermore, the use of names as a surrogate for cultural background is not considered to be subject to the same privacy restrictions that apply to information collected from individuals through forms and surveys.

In March 2014 the Office of the Australian Information Commissioner (OAIC) issued guidelines to assist organisations work with the Privacy Act as amended and, in particular, to help interpret the Australian Privacy Principles³.

This document states with reference to the matter of 'racial or ethnic origin':

"Information may be sensitive information where it unambiguously implies one of these matters. For example, many surnames have a particular racial or ethnic origin, but that alone will not constitute sensitive information that necessarily indicates the racial or ethnic origin of an individual with that surname." ⁴

This statement removes any uncertainty about the privacy status of using name origin as an indicator of cultural background.

Origins is a market-leading name recognition tool that is widely used to measure the cultural dimensions of customers, employees and, in fact, any list of individuals. The tool draws on substantial research over the past ten years. Underpinning the product is a family name database of more than 2.5m names, and a personal name database of almost 900,000 names. The data has been compiled from globally-sourced, publicly available sources.

The Origins product has also been used to summarise the outcome of processing a de-identified file of 15 million or so adults. This enables any analysis to compare cultural diversity from a list of individuals with the cultural diversity of any standard area in Australia.

Two frequently asked questions concern the coverage and accuracy of Origins codes. In terms of coverage, Origins guarantees a coding rate of more than 99.5% of reasonable quality name data. In terms of accuracy, Origins correctly assigns a 27-classification Origins code to around 85% of individuals⁵.

This makes Origins a robust tool for measuring cultural diversity and considerably exceeds the levels of representativeness and accuracy that would be achieved through the collection of data from individuals using forms and surveys – and at the fraction of cost of initial coding and ongoing maintenance.

⁵ Established through four separate pieces of research where a known near equivalent indicator of cultural background was available



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³ Office of the Australian Information Commissioner, 2014, Australian Privacy Principles guidelines – see http://www.oaic.gov.au/images/documents/privacy/applying-privacy-law/app-guidelines/APP guidelines complete version 1 March 2014.pdf

⁴ Ibid, Paragraph B.133, p27

Selected Sports: Data Samples

Seven popular and elite level sports were selected for analysis for this study – Tennis, Swimming, Australian Rules Football (AFL), Rugby League (NRL), Football (FFA/Soccer), Cricket and Endurance Cycling.

Each of these sports represents a major focus for Australia's participation and spectator market. All major sports recognise the role that sport has to play in promoting social cohesion and dedicate significant resource in promoting the values of diversity. Dedicated multicultural teams and programs mainly aim these programs at schools and younger members of the community.

Table 1 - Data Samples

Selected Sport	Date Sourced	Number of Records	
Tennis	Oct 2014	5,935	
Swimming	Oct 2014	1,821	
Australian Rules (AFL)	Aug 2014	809	
Rugby League (NRL)	Aug 2014	589	
Football (FFA)	Oct 2014	625	
Cricket	Oct 2014	255	
Endurance Cycling	Apr 2014	1.901	
Total		11.935	

Data for the analysis was sourced from a range of publicly available sources and the samples used for this research are summarised in Table 1.

Tennis embraces the largest number of publicly ranked players, the majority of whom are progressing through the junior ranks and achieving high standards through the large number of tournaments supported by Tennis Australia.

Swimming is similarly strongly represented in public rankings and, like tennis, includes a large number of juniors and emerging high performers in both short course and long course meets.

Because of the younger age profile of these sports, both offer a good opportunity to assess cultural diversity among the younger, emerging talent.

The Endurance Cycling list is compiled from a list of participants in the annual 3 Peaks cycling event held in the Australian Alps region of Victoria. Launched in 2010, the 3 Peaks Challenge is recognised as Australia's toughest single day cycling event and attracts participants from all Australian States as well as a small international representation.

AFL, NRL and Cricket lists are confined to the very top of each sport with data compiled from team listings on individual club web sites, with cricket including elite female players. The Football (FFA) lists were compiled from 'A' League club player lists, with the inclusion of non- 'A' League clubs who participated in the inaugural FFA Cup competition in 2014 and the 'W' League clubs for women footballers.

Overview of Analysis and Reporting

The Origins software evaluates the first and family name of each sportsperson and allocates each combination of names to one of 257 cultural origin codes. For practical purposes it is normal to

aggregate these into a smaller number of groupings that permit measurement and reporting in a statistically reliable way. In this analysis, the 257 Origins codes have been summarised to five broad name origin categories as shown in Table 2.

Table 2 - Summarised Origins Categories

ANGLO-SAXON
CELTIC
CALD - SOUTHERN AND EASTERN EUROPE
CALD - NON-EUROPEAN
CALD - NORTH WEST EUROPE

To provide greater detail, for the culturally and linguistically diverse (CALD) categories, the 257 Origins codes have been aggregated to the 12 groups (plus 'Other') indicated in Table 3.

Table 3 - Customised Origins Groups

ANGLO-SAXON	ASIAN ISLAMIC			
CELTIC	SOUTH ASIAN			
SOUTH EUROPE / LATIN AMERICA	EAST ASIAN			
NORTH WEST EUROPE	SOUTH EAST ASIA			
EAST / CENTRAL EUROPE	OCEANIA			
AFRICAN	OTHER			
ARABIC / NORTH AFRICA				

Where it is statistically valid to do so, we also drill-down to the components of the 12 groups for greater precision and insight.

A deficiency of name recognition occurs with reference to Australia's indigenous communities. Origins is very good at identifying indigenous Australians with traditional names but is less successful in differentiating those who have adopted, willingly or otherwise, personal and family names of Anglo-Celtic origin.

Consequently, the Origins analysis slightly understates the representation of members of the indigenous community and slightly overstates the representation of players with Anglo-Celtic heritage. This mostly affects the AFL and NRL where there is a long and successful history of recruitment and promotion of those codes to indigenous communities.

Currently there are 68 (8.4%) listed indigenous Australian players in the AFL⁶, significantly outperforming various estimates of their representation in the wider community, which themselves, show considerable variability⁷ and are subject to definitional issues and problems associated with self-identification.

⁷ The ABS indigenous population estimate for 30 June 2011 is around 670,000 people (3.0% of the population). The Ancestry question from the 2011 census reports that 0.5% of total respondents identify with an indigenous Australian heritage.



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⁶ See http://www.aflcommunityclub.com.au/index.php?id=790

Some 8% of NRL Holden Cup players are of indigenous background and 38% are of Pacific Islander heritage⁸.

Other sports are similarly affected by this undercount of indigenous Australians but to a much lesser extent. This perhaps reflects the success in embracing indigenous Australians through the policies, priorities and programs implemented by the two major football codes over the past twenty years.

However, because the indigenous population represents a small minority of the population, the underlying key messages in the narrative presented here, particularly in relation to non-indigenous CALD and Anglo-Celtic player representation, are substantially valid.

Summary Reporting

Table 4 summarises the percentage and index value for each sport in the broad Origins categories. The index value summarises the relationship between the category percentage for each sport and category percentage for the Australian adult population. For example, the percentage of AFL players in the "CALD – North West Europe" category is 8.0% (rounded) and the percentage of Australian adults in the same category is also 8.0% (rounded) producing an index value of 101.

Index values greater than 100 indicate an over-representation of a particular cultural group in that particular sport; index values less than 100 indicate an under-representation.

Index values greater than 150 are very significantly over-represented and are highlighted in red; index values between 120 and 150 are somewhat over-represented and highlighted in orange; very under-represented cultural groups are indicated with values less than 75 and highlighted in blue.

Table 4 - Summarised Origins Categories

Sorted by Australian Adults	Australian Adults	Elite Swimmers	Elite AFL Players	Elite NRL Players	Elite FFA Players	Elite Tennis Players	Elite Cricketers	Endurance Cycling
Percent								
ANGLO-SAXON	47.3%	49.5%	57.5%	39.9%	32.0%	38.0%	60.8%	54.0%
CELTIC	20.1%	25.2%	27.3%	21.7%	21.1%	19.5%	20.8%	25.0%
CALD - SOUTHERN AND EASTERN EUROPE	12.6%	8.9%	5.9%	9.2%	32.3%	21.2%	7.1%	7.6%
CALD - NON-EUROPEAN	12.0%	6.4%	1.2%	21.9%	7.5%	11.7%	2.4%	2.6%
CALD - NORTH WEST EUROPE	8.0%	10.0%	8.0%	7.3%	7.0%	9.6%	9.0%	10.8%
Index Values								
ANGLO-SAXON	100	105	122	84	68	80	129	114
CELTIC	100	125	136	108	105	97	103	124
CALD - SOUTHERN AND EASTERN EUROPE	100	71	47	73	256	168	56	60
CALD - NON-EUROPEAN	100	53	10	182	63	97	20	21
CALD - NORTH WEST EUROPE	100	126	101	92	88	120	113	136

Looking at the results sport by sport, the results suggest some marked differences and similarities in the extent of cultural diversity.

Elite swimmers show an over-representation of people with Anglo-Saxon and, particularly, Celtic backgrounds compared with the wider Australian population. North West European heritages (notably Dutch and Afrikaaner) are also strongly represented. Other longer term migrant groups

⁸ See http://e-brochures.com.au/nrl/annualreport2013/?cid=NRL HP Nav AR2013 p18



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such as those from Southern and Eastern Europe (eg Greek, Maltese and Polish) are noticeably under-represented, as are the more recent migrant groups of non-European, predominantly Asian descent. Among the latter group, Chinese, Indian and Vietnamese are poorly represented but Japanese and Korean are relatively well represented.

The AFL has more than three times the number of people with distinctive Australian names (ie names that are found more commonly in Australia than elsewhere). Along with an over-representation of Cornish names, these contribute to a strong Anglo-Celtic bias among the elite players of this sport. Almost 85% of AFL players are of Anglo-Celtic background; an elite AFL player is 11.8 times as likely to be of Anglo-Celtic descent as "CALD: Non-European". People of Greek background are significantly under-represented among the larger and more established migrant communities.

The NRL code contrasts markedly with the AFL insofar as Anglo-Saxon players represent less than 40% of the elite player list. As one might expect the NRL is relatively dominated by indigenous Australians, Maori, Samoans, Tongans, Fijians and people from several other Pacific Island and Melanesian communities. This reflects the tradition of various forms of rugby to import players from the parts of the world where physique and flair for game are most compatible with high performance.

Football (FFA) is another code that relies substantially on imported talent to boost the standard of the game and ensure its successful development. This is again reflected in an under-representation of Anglo-Saxon names, although Celtic (especially Irish) origins are over-represented. Stand-out representation occurs from Southern and Eastern Europe, including Italian, Greek, Spanish, Serbian, Croatian and Czechs. Although with smaller numbers, Arabic / North Africa and Africa are also over-represented. Among the under-represented groups are people of East and South Asian heritage.

Tennis is the sport that most closely reflects the Australian population but still displays considerable under-representation from the Cantonese, Vietnamese, Filipino and Indian communities. Also under-represented are people with English heritage names. To balance this, there is strong representation from the Southern and Eastern European communities, particularly the latter, where there is very solid representation from most Slavic countries. Greek and Spanish names are also well represented, as are German, French and Afrikaaner names from the North West European region. Japan is a stand-out counter-balance to the otherwise weak Asian representation and players of Oceanian background also out-perform.

Perhaps not surprisingly, cricket has the highest representation of people from an Anglo-Saxon background. With almost 91% of players from an Anglo-Celtic or North West Europe background, cricket, along with AFL and endurance cycling, is one of the three sports with the lowest proportion of CALD representation.

The endurance cycling event has a strong Anglo-Celtic and North West European bias with almost 90% of riders from those backgrounds. Italian, Greek, Vietnamese, Chinese, Korean and Indian and Korean are all significantly under-represented.

Looking at cultural groups across all sports, the most consistent under-performers are South Asian and South East Asian. Asian Islamic and Arabic / North African would be part of this list were it not

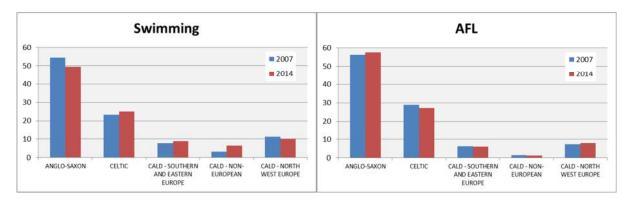
for their strong performance in FFA. Similarly East Asian is under-represented in all sports except tennis. Long term migrant communities from Greek, Italian and Slavic backgrounds are under-represented in all sports except FFA and tennis. By contrast, the most active cultural group across the sports is Celtic which is over-represented in all cases except tennis, where it is close to parity.

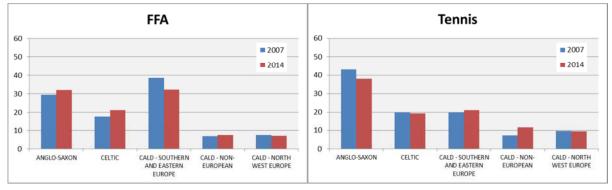
Trends Since 2007

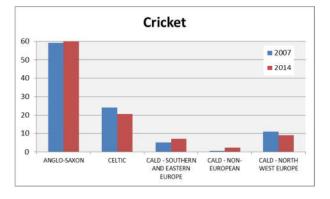
A similar analysis was conducted in 2007 for five of the sports used in this analysis. This is a period where several of the major sports had established and ongoing policies, often with dedicated resources, to promote greater diversity within their respective codes.

It is reasonable to expect that the pay-off from such commitment and investment will take time to translate into different outcomes at the elite level and, while it is probable that two snapshots may be insufficient to make conclusive observations about trends, it is nonetheless interesting to observe possible signs of change.

The following charts summarise the changes since 2007 for the broad categories.







Only tennis and swimming show signs of increasing diversity over the period, with FFA actually increasing its proportion of Anglo-Saxon and Celtic players. AFL and Cricket show little change over the period.

At a more detailed level, Swimming shows a trebling of the representation from East Asia and South East Asia, and a doubling from Arabic / North African and Asian Islamic communities, while the relative representation of Anglo-Saxon has reduced by more than 9 percent.

The major change in AFL representation is a slight increase in names originating from North West Europe and a marked decline in those with names that reflect an Indigenous Australian or Pacific Island origin (classified in the reporting as 'Oceania'). In this observation we refer to the earlier note concerning the limitation of name recognition when measuring the overall representation of members of the indigenous community. But we also emphasise that the base file for Australia contains a similar under-representation because it is coded with the same tool. Therefore, the error is similar in both the AFL file and the national base file, validating the comparison and the observed decline – at least for those with traditional indigenous names.

FFA shows a significant increase in players with African and Asian Islamic backgrounds, partly reflecting the practice of importing players from overseas to promote the game's development in Australia. Increases have also occurred among people of Anglo-Saxon and Celtic backgrounds from a relatively low base.

Tennis stands out as the sport showing the greatest growth in cultural diversity since 2007. Representation from Oceania (indigenous Australian and Pacific Islander) has more than trebled and people of African origin have more than doubled. South Asian and Arabic / North African have almost doubled and there are marked increases in players with Asian Islamic, East Asian and South East Asian origin.

Much of this growth reflects the regional status of Australia as the centre of excellence for tennis coaching, attracting young and emerging talent from Asian and Pacific Island countries that are less well endowed with coaching and playing facilities.

Cricket shows some growth in names that reveal Italian, Portuguese (including Sri Lankan Portuguese) and Greek heritage, as well as, from a low base, those indicating a South Asian and Asian Islamic heritage. But cricket has also seen growth in the traditionally dominant Anglo-Saxon segment.

Several CALD groups show signs of increased participation over the period 2007 to 2014. Names revealing Arabic / North African and Asian Islamic backgrounds show growth across all sports, while South Europe / Latin America shows growth in all sports except AFL. On the other hand, people with names of North West European origin show a decline in all sports except AFL and there is marked reduction of Anglo-Saxon representation in Swimming and Tennis.

Conclusion

The current state of cultural diversity is revealed for the seven sports. Where possible, comparisons are made with 2007 providing an indication of whether trends are suggesting a movement towards greater diversity.

This approach to understanding cultural diversity, based on the intelligent analysis of personal and family names, coupled with a national base file created using the same tool, quantifies the cultural differences in elite-level participation between sports, and also between cultural groups.

Name recognition provides a fast and cost-efficient way of measuring cultural diversity. The approach can be applied to customer lists (with subsets to gain insight into the cultural dimensions of product take-up, value, channel preference, propensity to churn, credit risk, etc), employee lists (to establish benchmarks for cultural diversity in the workplace and the extent to which it reflects the labour market and the customer base, and improved customer service (eg through tailored delivery of service on websites and in call centres), and geographically-defined market areas.

In the context of sports analysis, the snapshot analysis presented here can be used to inform administrators, multicultural policy officers and government funding bodies about the effectiveness of initiatives to broaden engagement with Australia's multicultural communities.

Specifically related to this context, this analysis can readily be extended to

- Sports for which data is not readily available
- Spectator analysis ticket sales
- Club membership
- Grass roots participation for major sports

Specific sport-by-sport discussion will be presented in future issues of the OriginsInfocus newsletter over the coming year or so.

Michael Dove, Principal Researcher, OriginsInfo

December 2014

For further information, please contact:

Michael Dove – 0418 359 711 – michael@originsinfo.com.au