

Orthoptics Australia Workforce Survey 2017

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ABSTRACT

Purpose: This paper presents the results of the 2017 Orthoptics Australia Workforce Survey (OWS). The results are compared and contrasted with the outcome of the previous 2012-2013 OWS.

Method: The 2017 OWS was implemented using the online tool - SurveyMonkey. All financial members of Orthoptics Australia were contacted to participate in the OWS. To achieve maximum uptake, non-OA members were also encouraged by colleagues to participate in the workforce survey, through publicity at annual conferences and via social media.

Results: Three hundred and twenty-eight orthoptists responded to the 2017 OWS. The profession continues to be female dominated (88.7%), with a young workforce (49.9% between 20-39 years), and high levels of Australian

nationality (94%). Most respondents (79.9%) worked in metropolitan NSW (46.7%) or Victoria (31.1%). The main components of current orthoptic employment included public sector (24.9%) and salaried positions in the private sector (52.5%), with 89.5% working in orthoptic related clinical work. Levels of satisfaction with current hours of work were high (91.3%), with 56% indicating their intention to continue to work in an orthoptic-related field for more than the next 10 years.

Conclusion: The 2017 OWS provides a broad overview of the current orthoptic workforce and modes of practice in Australia. These comprehensive survey results can be applied to workforce development, and are available to government and health bodies for future eye health care planning.

Keywords: orthoptics, workforce, survey

INTRODUCTION

The Australian orthoptic workforce plays a vital role in the provision of eye health care services to a population that is diverse in age, health and disability. As identified in the 2012-2013 Orthoptics Australia Workforce Survey (OWS),¹ Australia is faced with managing the health demands and associated costs of an ageing population. The Commonwealth of Australia² has predicted that by 2032 the Australian population will increase by 27% to approximately 25 million, with people over the age of 55 years doubling to 8.9 million. Vision 2020 Australia³ reported on the economic impact of vision loss in Australia, with the direct cost of treating eye disease being AU\$2.98 billion, and the allocated health expenditure on eye conditions growing

in real terms by approximately 4.8% per annum. This report further estimated a parallel increase in age-related eye disease in the ageing Australian population, with the most prevalent conditions being age-related macular degeneration, glaucoma and cataract in people aged over 40 years.

In 2017 Orthoptics Australia (OA) developed and implemented a workforce survey to report on contemporary Australian orthoptic practice, by exploring demographics, education levels, employment, student education involvement, and nature of clinical practice. This paper reports detailed outcomes on each area and discusses changes in the profession since the OWS conducted in 2012-2013. The findings also highlight the capacity of the Australian orthoptic workforce to respond to predicted eye health care needs.

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METHOD

All 2017 financial members of OA (n=470) were contacted via email to participate in the 2017 OWS; orthoptic students were excluded. As membership of OA is voluntary, the number of respondents to the 2017 OWS did not represent all orthoptists in the workforce. To achieve maximum uptake of the survey, non-OA members were encouraged by colleagues to participate in the 2017 OWS, through publicity at annual conferences, state OA events and on social media platforms. Access to an individual survey attempt could not be shared with multiple participants, thus limiting participation to one response per person.

The 2017 OWS was implemented using the online survey tool, SurveyMonkey.⁴ The 2017 OWS aimed to collect data on the demographics, academic qualifications, employment patterns and professional practice of orthoptists working in Australia. The 2017 OWS was pretested by a working party prior to release, and contained quantitative and qualitative questions that allowed comparison to the 2012-13 OWS. The 2017 OWS consisted of 68 questions that required participants to respond using a Likert scale, or to provide descriptive responses/opinions (Appendix 1). No questions were compulsory, and participants were free to choose the questions they wished to answer. Data were collected from 1 July 2017 to 31 December 2017, with four email reminders sent to all members during this time. Descriptive statistical analysis of the 2017 OWS was conducted using the data analysis tool embedded in SurveyMonkey.

RESULTS

A total of 328 orthoptists responded to the 2017 OWS including 291 OA members, and 31 non-OA members; 6 respondents did not indicate their membership status. The OA members who responded represented 70% of the OA financial membership at that time. The minimum response rate to all questions in the survey was 85%.

Demographics

In response to gender, 289 (88.7%) respondents identified as female and 37 (11.3%) identified as male. This reflected a slight reduction in females and an increase in males from the 2012-13 OWS (90.6% and 9.4%, respectively). Age was reported by 327 respondents with an overall age range from 20 years to greater than 60 years (Table 1). Compared to the 2012-13 OWS a reduction in respondents aged 20-29 years occurred, however, an increase in the 60 years and over age range was evident.

Table 1. Respondent ages

	2017 OWS (n = 327)	2012-2013 OWS (n = 415)
20 to 29 years	84 (25.7%)	158 (38.1%)
30 to 39 years	79 (24.2%)	97 (23.4%)
40 to 49 years	65 (19.9%)	75 (18.1%)
50 to 59 years	56 (17.1%)	66 (15.9%)
60 years and older	43 (13.2%)	13 (3.1%)

Nationality was provided by 310 respondents, with 306 (98.7%) indicating Australian nationality and 4 (1.3%) New Zealand nationality. Of the 310 respondents some also indicated dual nationality with Australia and countries such as the United Kingdom, Lebanon, Iran, Poland, United States of American, Nepal, India, Indonesia and Malaysia. Respondent nationality was not questioned in the 2012-13 OWS, so no comparison was possible.

The majority of respondents, 225 (77%) indicated that they were employed in NSW or Victoria. Table 2 shows the respondent's state or territory, with a slight increase in respondents in South Australia, Western Australia and the Australian Capital Territory since the 2012-13 OWS.

Table 2. Respondent state or territory

	2017 OWS (n = 293)	2012-2013 OWS (n = 398)
NSW	135 (46%)	195 (47%)
Victoria	90 (31%)	144 (34.7%)
Queensland	23 (7.8%)	28 (6.7%)
South Australia	14 (4.7%)	8 (1.9%)
Western Australia	14 (4.7%)	11 (2.7%)
Australian Capital Territory	10 (3.4%)	6 (1.4%)
Tasmania	6 (2%)	6 (1.4%)
Northern Territory	1 (0.3%)	0

Education

Over several decades the academic qualifications of orthoptists have evolved from a diploma to a graduate entry master's degree. The 2017 OWS collected details of initial orthoptic qualifications, subsequent academic qualifications and higher degrees. The 2017 OWS results indicated that 76 (24.4%) of the respondents qualified as an orthoptist with a master's degree, an increase from the reported 12.8% in 2012-13. In the 2017 OWS, 135 (43.3%) respondents qualified with a bachelor's degree, which was a reduction from the 2012-13 OWS finding of 49.4%.

Respondents who graduated with either an associate diploma or diploma numbered 102 (32.4%), increasing from the 27.7% reported in the 2012-13 OWS. One hundred and sixty (51%) respondents reported gaining their

qualifications in NSW and 136 (43%) in Victoria; this aligned with the 2012-13 OWS findings of 51.6% qualifying in NSW and 44.1% qualifying in Victoria. Twenty-one (6%) indicated they gained their orthoptic qualifications overseas, a slight increase from the 4.3% reported in the 2012-13 OWS.

Seventy-seven (34%) respondents indicated their initial academic qualification for entry into a Master of Orthoptics. Sixty (77.9%) reported holding a bachelor's degree in science including health sciences, medical science and general science. Other initial bachelor's degrees included optometry, psychology, arts, education, accounting, forensic biology and one respondent held a Master of Clinical Epidemiology. Further, participants were asked to identify their additional tertiary qualifications, related to or independent of orthoptics. Ten respondents (3.1%) identified they held a PhD; 109 (33.6%) held a master's degree; 141 (43.5%) held a bachelor degree; and 64 (19.8%) held either a diploma or associate diploma.

Current employment

Work sector

Two hundred and ninety-five respondents indicated that they were currently working in an orthoptic-related field and of these, 264 (89.5%) were involved in clinical practice. The main components of clinical practice included 156 (52.4%) salaried positions in the private sector, and 74 (24.9%) in public sector employment. Other areas of employment included contractor in the private sector (10.8%); self-employed (5.7%); locum (6.4%); education (6.1%); research (6.4%); non-government agencies (5.7%); and industry (1.0%).

Work location

Of those currently employed, 235 (79.9%) practised in a metropolitan area, 41 (17.4%) practised in a regional area and 7 (2.4%) practised in a rural/remote area; these findings were very similar to the 2012-13 OWS. The nature of employment was questioned, with 244 (84.4%) respondents indicating they were permanently employed; 30 (10.4%) reporting casual employment; and 15 (5.2%) employed on a temporary basis.

Work hours

Of those currently employed, 187 (62.5%) indicated that, on average, they worked greater than 25 hours per week. Sixty-five (21.8%) indicated that they worked on average between 12 and 25 hours. Satisfaction with the current hours of work was high with 274 (91.3%) indicating that they were satisfied with their job and the hours it offered; this was a similar finding to the 2012-13 OWS, where 89.8% indicated satisfaction with their employment hours. Respondents were asked if they would prefer to be employed more hours than their current situation. Two hundred and fifty-five (86.2%) respondents did not want to be employed

additional hours per week.

Projected Work Attrition

One hundred and sixty-six (56%) respondents indicated that they were likely to continue to work in an orthoptic-related field for greater than ten years; 64 respondents (21.6%) indicated that they would continue for up to five years; and 66 respondents (22.3%) indicated between five and ten years.

Workplace staff mix

Respondents were asked to identify the nature of the staff mix in their workplaces, including qualified and unqualified staff. In addition to orthoptists, ophthalmologists and ophthalmic registrars, eyecare workplace staff mix included optometrists (60), ophthalmic nurses (100), qualified ophthalmic technicians (31), unqualified ophthalmic workers (50), vision scientists (13), and optical dispensers (9).

Involvement in student clinical education

At the time of the 2017 OWS, 161 (55%) respondents indicated they were involved in the clinical supervision of orthoptic students in their workplace; this showed increased involvement from the 44.1% finding from the 2012-13 OWS. The 132 (45.1%) respondents who were not involved in orthoptic student education indicated a variety of reasons for non-participation including time restrictions imposed by their clinical workload, a lack of clinical space to accommodate a student, remoteness from the tertiary institution, irregularity of clinical sessions, and that they were not currently involved with the academic institutions.

Nature of clinical practice

Respondents were asked to identify all areas of clinical practice related to their current employment and were free to select more than one response from a list of categories. Three hundred and twenty-four (99%) respondents identified they were involved in traditional orthoptic practice areas including ocular motility, paediatrics and neuro-ophthalmology. In the area of general ophthalmology, 296 (91%) respondents indicated that they were involved in areas such as surgical assisting and refractive surgery, an increase on the 75.4% who indicated working within the general ophthalmology sector in the 2012-13 OWS. Other respondents indicated practice in low vision (57), education (47), research (35) and rehabilitation (25).

Respondents were asked to identify their participation in conducting specific clinical tests. These included medical history taking, visual acuity assessment, ocular motility assessment, ophthalmic testing and specialised screening, eg glaucoma screening (Table 3).

Table 3. Participation in specified areas of clinical practice

	Assessed on every patient	Assessed as needed	Never assessed
Medical history taking	152 (53%)	132 (46%)	5 (1%)
Visual acuity assessment	272 (95.1%)	14 (4.9%)	0
Ocular motility assessment	51(17.8%)	208 (72.5%)	28 (9.8%)
Ophthalmic testing	122 (43%)	127(44.7%)	35 (12.3%)
Specialised screening	38 (13.4%)	198 (70%)	47 (16.6%)

Independent orthoptic practice

One hundred and sixty respondents reported an involvement in independent orthoptic practice. Of these, 127 (79%) identified a variety of roles including paediatric triage, strabismus and amblyopia management, outreach vision screening, glaucoma monitoring, electrophysiology, pre and post-operative cataract care and refraction, low vision; rehabilitation, diabetic screening and ocular screening for adverse drug effects.

DISCUSSION

The results of the 2017 OWS presented in this paper provide an overview of contemporary Australian orthoptic practice. Whilst this survey was limited by the number of respondents, the results have been compared to the outcomes with the previous survey conducted in 2012-2013. As highlighted in the 2012-13 OWS,¹ determining the number of orthoptists working in Australia continues to be challenging. OA membership is not compulsory for practising orthoptists and in the case of the 2017 OWS, only 70% of current financial OA members participated. However, by comparing Australian census data from the 2011 Australian Census¹ (where 678 respondents indicated their profession as orthoptics), to the most recent census in 2016 (where 834 respondents indicated their profession as orthoptics) (Kiriakidis L, personal communication, 10 September 2018), a 19% increase has occurred, indicating a continued and steady growth in the profession.

The pattern of an Australian female-dominated orthoptic workforce continues, with the gender distribution between male and female similar to the 2012-13 OWS.¹ However, with the expansion of career options and clinical practice areas, the opportunity to increase gender equity could be a future focus for the profession.

The age distribution of the respondents in the 2017 OWS proved similar to that reported in the 2012-13 OWS.¹ In 2017, approximately 70% of respondents were under 50 years of age, with 48.9% of the respondents being younger than 40 years of age. This highlights that orthoptics is

sustained by a relatively young workforce, particularly as only 13.2% of the respondents were greater than 59 years of age. The impact on the provision of orthoptic services across Australia with the future retirement of this small group should be minimal. Further, 50% of respondents indicated that they intended to continue in the profession for more than ten years. These numbers also support a strong workforce.

The trend for the majority of orthoptists to work in NSW and Victoria in metropolitan areas continues when compared to the 2012-13 OWS.¹ Workforce shortages are reported in rural and remote areas, and states other than NSW and Victoria. In addressing this issue, Australian universities have encouraged orthoptic students to complete clinical training outside of metropolitan areas to broaden their post-university outlook on potential areas of employment. Also, OA continues to have involvement in opportunities that promote the profession more broadly.

The results of the 2017 OWS reveal that the orthoptic workforce is highly educated with more than half of the respondents holding a bachelor and/or master’s degree, and ten respondents holding a PhD. Additionally, an increase in the number of orthoptists with non-orthoptic higher qualifications was evident.

An interest in the continuity of the profession was apparent from the number of respondents who indicated their commitment to the education of orthoptic students, with 55% of the respondents involved in supervision of students in their workplaces.

The 2017 OWS revealed a sound level of satisfaction regarding employment levels within the current Australian orthoptic workforce. Sixty-three percent of orthoptists worked more than 25 hours per week, with 86% satisfied with their current work hours. Ninety-one percent reported that they were satisfied with their current job. It was interesting to note the workplace staff mix reported by respondents in the 2017 OWS, with a variety of qualified and unqualified staff holding roles in Australian eye health care.

In an environment where health economics demand efficiencies and increased productivity, orthoptists are cost-effective health providers with the capacity to co-manage chronic eye disease in private and public, primary and tertiary systems. The 2017 OWS shows that orthoptists are well placed to significantly contribute to caring for the ageing Australian population. The 2017 OWS reveals an orthoptic workforce that has a sound educational foundation, and a profession that has evolved areas of advanced orthoptic practice to meet emerging needs, such as glaucoma and cataract monitoring. These findings can be used to underpin future health planning, to ensure comprehensive and timely eye care for all Australians.

Study strengths and limitations

By nature of surveys, the capacity to report is limited by the number of respondents and the questions they choose to answer. Given the number of respondents represented 70% of the OA financial membership in 2017, and the minimum response rate to all questions in the survey was 85%, the authors believe the 2017 OWS outcomes are representative of contemporary Australian orthoptists.

CONCLUSION

The results of the 2017 OWS have revealed that Australian orthoptists hold vital roles in a competitive, multidisciplinary environment, one that is characterised by a staff mix of colleagues who hold a variety of qualifications. The orthoptic workforce is well suited for this role, with high levels of tertiary education including higher degrees and PhDs, and a diverse knowledge base seen in the entry level degrees held by members. Orthoptists have shown their commitment to investing in the future of orthoptics, with over half indicating their involvement in student clinical education. Australian orthoptists therefore continue to meet the evolving demands of current and future primary and tertiary eye health care.

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Appendix 1. Questions included in 2017 Orthoptics Australia Workforce Survey

Q1. What is your nationality?
Q2. Please indicate your age by selecting one of the age ranges below.
Q3. Please indicate your gender.
Q4. Do you speak a language other than English in your workplace?
Q5. What was your initial qualification in Orthoptics?
Q6. Please indicate where you gained your initial orthoptic qualification.
Q7. If you hold a Master of Orthoptics, please indicate the initial degree that contributed to you successfully gaining enrolment in the masters program.
Q8. Please indicate the number of years since you graduated as an orthoptist.
Q9. Do you hold any other tertiary qualifications in Orthoptics or other fields?
Q10. What is your current highest tertiary qualification?
Q11. Are you a member of Orthoptics Australia?
Q12. Are you registered with the Australian Orthoptic Board?
Q13. Do you plan to apply for a Certificate of Currency in this coming biennium 2017-2019?
Q14. Are you registered as a Medicare provider?
Q15. Are you registered as a National Disability Insurance Scheme provider?
Q16. Are you registered as a private health insurance provider?
Q17. Are you registered with the Department of Veteran Affairs for the provision of services?
Q18. Do you have your own personal indemnity insurance policy, i.e. you do not rely on your employer's indemnity insurance?
Q19. Do you hold membership or registration with any of the following organisations?
Q20. What was the nature of your first job?
Q21. Approximately how long did you remain in your first job?
Q22. Did you move from your home state to gain a job as an Orthoptist?
Q23. Please answer this question if you are currently working in an orthoptic related field. Please indicate which area you are currently working in.
Q24. Please answer this question if you are not working in an orthoptic related field. Please indicate the main reason why you are not currently working in an orthoptic related field.
Q25. Please answer this question if you are not working in an orthoptic related field. Do you plan to return to working as an orthoptist?
Q26. Please select from the list below those areas that you work in each week.
Q27. Please indicate the average number of hours per week that you currently work as an orthoptist.
Q28. Would you prefer to be employed more hours than your current situation?
Q29. What attracted you to your current position?
Q30. Please indicate your current level of satisfaction in relation to your job and the capacity it offers you to utilise your skills.
Q31. Please indicate your current level of satisfaction in relation to your job and the variety of work it offers you.
Q32. Please indicate your current level of satisfaction in relation to your job and the capacity it offers you to have sufficient work to maintain competency in your role as an orthoptist.
Q33. Please indicate your current level of satisfaction in relation to your job and the hours of work it offers you.
Q34. Please indicate your current level of satisfaction in relation to your job and the daily workload you are responsible for.
Q35. Please indicate your current level of satisfaction in relation to your job and the capacity it offers you for career progression.
Q36. How many years are you likely to work in an orthoptic related field?

Q37. Please answer this question if in the last 12 months have you taken more than 3 months off from orthoptic related work for any reason. Please indicate your primary reason.
Q38. Would you consider moving to a rural area or interstate for an orthoptic related role?
Q39. Have you ever worked overseas as an orthoptist?
Q40. In your workplace is there an unmet need for orthoptists? For example, your workplace has been unable to fill orthoptic positions.
Q41. Please indicate which state/territory you are currently working in.
Q42. Do you work in more than one location in your main job?
Q43. What is the location of your main job?
Q44. If you answered metropolitan for the location of your main job, please answer this question. Did you grow up in a metropolitan area?
Q45. If you answered metropolitan for the location of your main job, please also answer this question. Do you intend to remain in a metropolitan area for the next 5 years?
Q46. If you answered regional or rural/remote for the location of your main job, please answer this question. Did you grow up in a such an area?
Q47. If you answered regional or rural/remote for the location of your main job, please also answer this question. Do you intend to remain in this regional or rural/remote area for the next 5 years?
Q48. How would you best describe the main component of your current orthoptic employment?
Q49. How would you describe the nature of your current employment?
Q50. How would you describe the clinical area of your main current employment?
Q51. In your current employment, please indicate your involvement with research.
Q52. Please answer this question if you are involved in research in your current employment. Please tick which options best describe your role in research.
Q53. Are you involved in orthoptist led clinics, i.e. clinics where patients are reviewed solely by the orthoptist?
Q54. Which other eye health professionals work in your current workplace?
Q55. Please indicate from the list below other practice staff who perform investigation and treatment in your workplace.
Q56. What is the most common patient age range that applies to your job?
Q57. Do you supervise orthoptic students in your current workplace?
Q58. In a clinical session where you see patients, how often do you take a medical history?
Q59. In a clinical session where you see patients, how often do you assess visual acuity?
Q60. In a clinical session where you see patients, how often do you assess ocular motility?
Q61. In a clinical session, how often do you conduct ophthalmic testing?
Q62. In a clinical session where you see patients, how often do you conduct specialised screening, e.g. paediatric screening , glaucoma screening
Q63. Please indicate your current income bracket.
Q64. Have you participated in any of the following activities over the past 12 months?
Q65. Are you continuously developing your clinical knowledge and skills?
Q66. What do you perceive the role of Orthoptics Australia is in your professional development?
Q67. Do you perform any volunteer work related to eye health?
Q68. What do you perceive are the main challenges facing the profession of Orthoptics in Australia?