

Knowledge, Attitude, and Perception of African Optometrists on Fellowship of the American Academy of Optometry (AAO): A Cross-Sectional Survey

Godwin Ovenseri-Ogbomo¹, Susarah Maria Richter², Bernadine N Ekpenyong³, Stephen Ocansey⁴, Anne Effiom Ebri³, Kwadwo O Akuffo⁵, Uchechukwu L Osuagwu^{6,7}

¹Department of Optometry, Centre for Rural Health Sciences, University of the Highlands and Islands, Inverness, UK; ²Department of Optometry, Faculty of Health Sciences, University of Johannesburg, Johannesburg, South Africa; ³Department of Public Health, College of Medical Sciences, University of Calabar, Calabar, Nigeria; ⁴School of Optometry and Vision Sciences, School of Allied Health Sciences, College of Health and Allied Sciences, University of Cape Coast, Cape Coast, Ghana; ⁵Department of Optometry and Visual Science, College of Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; ⁶School of Medicine, Bathurst Rural Clinical School, Western Sydney University, Bathurst, New South Wales, Australia; ⁷African Vision Research Institute, Discipline of Optometry, University of Kwazulu-Natal, Durban, South Africa

Correspondence: Uchechukwu L Osuagwu, Senior Lecturer and Academic Lead, Rural Health, School of Medicine, Bathurst Rural Clinical School, Western Sydney University, PO Box 9008, Bathurst, NSW, 2795, Australia, Tel +61 2 9685 9903; +61 401 193234, Email l.osuagwu@westernsydney.edu.au

Introduction: Following the formal launch of the AAO-African Chapter in October 2023, there was a renewed interest among African Optometrists to obtain the Fellowship of the American Academy of Optometry (FAAO). This paper investigates the awareness of the FAAO process among African optometrists and their perception of the newly established African Chapter's role in advancing the profession on the continent. The survey addresses a critical gap in understanding and highlights the pivotal role the African Chapter can play in advancing the optometry profession on the continent, contributing valuable insights for shaping strategies to enhance awareness, promote professional development, and foster a sense of belonging among African optometrists within the global optometry community.

Methods: A self-administered web-based cross-sectional survey was conducted from October 25 to 30, 2023, targeting African Optometrists who had joined the candidate for AAO WhatsApp group, created by the African Chapter. The survey aimed to collect data on the participants' knowledge, perceptions, and attitudes toward the FAAO process and the newly established African Chapter.

Results: The majority of the 302 African optometrists that participated in the survey, were under 40 years old and predominantly from Nigeria or Ghana. Despite a high intention to apply for the FAAO (77.2%), a significant proportion (82.1%) were unaware of the process. Nevertheless, nearly half of the respondents perceived benefits from the fellowship with regard to enhancing professional development and status. While one-third of respondents were aware of the African Chapter before joining, nearly all expressed a desire to become official members.

Conclusion: The critical gap in awareness regarding the FAAO process among African optometrists suggests the need for targeted strategies to increase awareness, promote professional development, and foster a sense of belonging among African optometrists within the global optometry community.

Keywords: education, optometry, awareness, professional development, equity

Introduction

The American Academy of Optometry (AAO) was founded in 1922 following a meeting of eight optometrists at the Planter's Hotel in St. Louis, Missouri.¹ The organization implemented a new strategic objective plan in 2020 with its focus on evidence-based education, stimulating and advancing optometry research, increasing its footprint through membership, mentoring future leaders, and forming strategic partnerships across the globe.^{2,3} The fellowship of the American Academy of Optometry (FAAO) represents a distinguished level of professional, academic, and research

achievements within the field of optometry. In recognition of this specific contribution, the award of FAAO designation is indicative of the optometrist's commitment to improving their field of expertise, contributing to scientific knowledge, demonstrating exemplary dedication to patient care, and making an impact in communities around them and the larger profession. The designation not only signifies discerned academic accomplishment and clinical proficiency but also serves as a testament to their ongoing commitment to the highest standards of ethical practice and continuous professional development as described by the AAO and applicable to the registered optometrists in their specific state or country where they practice.²

Various studies have reported the nature of optometry practice, education, or standards in Africa, but Optometry is a licensed profession in Africa. In two African countries (Ghana and Nigeria),^{4–6} optometrists complete a minimum of six (6) years of training leading to the award of Doctor in Optometry (OD), which empowers Optometrists to provide general eye care including treating eye diseases, refractive errors, low vision and contact lenses. In other African countries, optometry training ranges from four to five years, leading to an optometry degree. In 2020, it was reported that at least 33 institutions in 16 countries were offering optometric education across Africa.⁵ Although optometrists from the African continent have obtained such fellowships (FAAO) in the past, there appears to be a general lack of awareness of the pathway to obtaining the fellowship among the vast majority of optometrists who participated in an unpublished census survey conducted by the International Taskforce Committee of the AAO between September 15–October 1, 2023. The information was presented in a recent report to the Academy Board on 21 November 2023. The awareness and perception of the fellowship among optometrists from Africa hold a unique and significant place within the continent's dynamic landscape of eye care.

There is evidence that the reputation of a professional body, career and networking opportunities, professional status, and international recognition are factors considered by individuals before joining a professional organization.⁷ Margolis et al⁸ support the same argument in a study conducted on Commonwealth Scholarships. Although the participants in that study were research fellows, the same values and principles were reported as valued by the AAO, including improving their knowledge and skills level across a broad base of academic and professional areas, transferring that knowledge, mentoring, and improving on their leadership skills.

Oduntan et al⁶ reported that optometry in Africa should seek to attain the highest professional standard of care and unify its clinical practice standards to improve patient care. This will be beneficial for all, including specialist areas like contact lenses, pediatrics, binocular vision, low vision, and public health.² As of 2020, a report highlighted the absence of postgraduate clinical education, such as residency and fellowship programs, in Africa,³ therefore this paper investigated the perception and awareness of Optometrists in Africa about their knowledge of, and the process for obtaining, the FAAO and their perception of the newly established African Chapter for progressing the profession in the continent.

Materials and Methods

A self-administered web-based cross-sectional survey was conducted among African optometrists who joined the candidate for AAO WhatsApp group. This WhatsApp group had existed before the official recognition of the African chapter by the Academy and joining the group was voluntary. The survey ran between 25 and 30 October 2023 and was designed to obtain information on knowledge, perceptions, and attitudes of optometrists, towards the FAAO. Respondents were optometrists from across Africa, who had expressed interest in becoming members and obtaining the Fellowship of the American Academy of Optometry. The survey ran prior to an information session describing the process of obtaining the Fellowship. The questionnaire was modified from a similar questionnaire used by the AAO to survey the opinions of their members—the questionnaire comprised closed- and open-ended questions. Members of the international taskforce of the AAO had pretested the survey before its initial use and as such no further piloting was needed. In this study, the modification was only made to suit the peculiarity of the survey population and the objective of the present study. A binary sex categorization (male/female) was used in this study which indicates the sex designated at birth. The questionnaire explored information relating to their knowledge of the Academy such as knowing the process of becoming a member and Fellow of the Academy, their intention to apply to become a member of Fellow of the Academy, any barriers they perceive to becoming a member of Fellow, how obtaining the Fellowship will impact their professional practice.

The final questionnaire (shown in [Appendix A1](#)) was designed using Google Forms (Google Inc, CA, USA), and the e-link was posted on the African Fellowship candidate WhatsApp group and sent via emails to African candidates for fellowship, some of whom were not on the WhatsApp group. A snowball recruitment approach was also used to ensure a wider reach of optometrists beyond the WhatsApp group by encouraging participants to post the survey link on the various optometry groups they belonged. A QR code of the survey link was also made available before the start of an online information session on “How to become a Fellow”, presented by the African Chapter of the AAO. For the purpose of awareness creation, the information session was open to all optometrists across Africa, and any candidate was free to complete the questionnaire and could opt out without submitting the questionnaire on Google Forms. The survey link was sent to the emails of 656 candidates for fellowship who are members of the WhatsApp group. All procedures were performed in compliance with the tenets of the Declaration of Helsinki and were approved by the Human Research Ethics Committee of the University of KwaZulu Natal, South Africa. At the start of the survey, participants were informed by a preamble of the anonymity and confidentiality of the responses provided and individual participants could not be identified.

Data analysis was conducted using SPSS v26 for Windows (Armonk, NY: IBM Corp, USA). Simple descriptive statistics of proportions and mean (standard deviations) were used for categorical and continuous variables, respectively. Results were presented using tables and charts to summarize the data.

Results

Of the 645 members in the WhatsApp group at the time, a total of 335 respondents completed the questionnaire. However, following data cleaning and removal of incomplete responses, 302 responses were eligible for analysis. This represented about 48% of the total number of African optometrists who have signed up to join the African Chapter of the American Academy of Optometry (AAOA). [Table 1](#) shows the demographic and other attributes of the respondents

Table 1 Demographic Attributes of the Respondents. N = 302, Otherwise n Was Indicated

Variables	Frequency (%)
Demography	
Age category in years	
20–29	108 (35.8)
30–39	124 (41.1)
40–49	49 (16.2)
50–59	19 (6.3)
60–69	2 (0.7)
Sex	
Males	159 (52.6)
Females	143 (47.4)
Country of birth (n = 300)	
Ghanaian	146 (48.3)
Nigerian	140 (46.4)
Nigerian/British	3 (1.0)
South African	3 (1.0)
Malawian	2 (0.7)
Others (Cameroonian, Djiboutian, Swati, Tanzanian, Ugandan)	5 (1.5)
Years in practice (n = 299)	
Mean ± SD	9.2 ± 8.5
0–9 yrs	174 (58.2)
10–19 yrs	91 (30.4)

(Continued)

Table 1 (Continued).

Variables	Frequency (%)
20–29 yrs	23 (7.7)
30–40 yrs	11 (3.6)
Qualification obtained at graduation (n = 300)	
OD	287 (95.7)
BSc/BOptom	12 (4.0)
Diploma	1 (0.3)
Highest level of education (n = 296)	
Postgraduate Degree (MSc, PhD)	59 (20.0)
OD	234 (79.0)
BSc/BOptom	3 (1.0)

indicating that nearly all were ODs (about 20% had a postgraduate degree), the majority were younger than 40 years (76.9%), mostly men, were either from Nigeria or Ghana, and had practiced for about 9 years as optometrists.

Participants Knowledge of the American Academy of Optometry

Table 2 shows the knowledge of, and dealings of, the respondents about the AAO as well as the process of obtaining the FAAO. Over 90% of the respondents had heard of the AAO, mostly through word of mouth (157, 66%) from Fellows of the Academy. A small proportion (6.7%) had attended a previous Academy meeting, but nearly every one of the

Table 2 Respondents' Knowledge and Dealing with the American Academy of Optometry (AAO). FAAO, Fellowship of the American Academy of Optometry

Variables	Frequency n (%)
Aware optometrists trained outside of North America can obtain Fellows of AAO (n = 299)	
Yes	27 (9.0)
No	272 (91.0)
Heard of AAO (n= 301)	
Yes	279 (92.7)
No	22 (7.3)
Source of information regarding AAO (n = 238)	
Word of mouth	157 (66.0)
Internet search	31 (13.0)
Social media	27 (11.3)
Journals	5 (2.1)
Conference	12 (5.0)
AAO Website and Meeting	6 (2.5)
Knowledge of how to obtain FAAO (n=302)	
Yes	54 (17.9)
No	248 (82.1)
Can Optometrists trained outside of US and Canada obtain FAAO (n=302)	
Yes	233 (77.2)
No	69 (22.8)
Do you intend to apply for membership/Fellowship of AAO (n=296)	
Yes	277 (93.6)
No	1 (0.3)
Maybe	18 (6.1)

(Continued)

Table 2 (Continued).

Variables	Frequency n (%)
Have attended Academy Meeting (n=300)	
Yes	20 (6.7)
No	280 (93.3)
Reasons for not attending Academy Meeting (n=465) *	
Visa	191 (41.1)
Travel cost	229 (49.2)
Time of meeting	42 (9.0)
Language	3 (0.6)
Are you interested in attending future Academy Meetings (n=299)	
Yes	291 (97.3)
Maybe	8 (2.7)
Will you be attending Academy 2024 in Indianapolis? (n=299)	
Yes	83 (27.8)
No	43 (14.4)
Maybe	173 (57.9)
How would becoming a Fellow influence your career? (n = 603) *	
Promotion in position	76 (12.6)
Increase in salary	43 (7.1)
Social/professional status	197 (32.7)
Professional development	285 (47.3)
Others (working in US, attending international conference	2 (0.3)
Would you have any challenges in attending a live meeting for your oral examination? (n = 285)	
Yes	60 (20.9)
No	165 (57.5)
May be	62 (21.6)

Notes: *Multiple responses.

Abbreviations: FAAO, Fellowship of the American Academy of Optometry; KAP, Knowledge, attitude and perception.

respondents (291, 97.3%) indicated an interest in attending future Academy meetings, with 27.8% (n = 83) stating they would like to attend the 2024 Academy meeting in Indianapolis.

Participants' responses varied when asked about their reason for wanting to attend an Academy meeting (Figure 1) and ranged from obtaining advanced clinical training (23%) and continuing education (23%) as the major reasons to paper or poster presentation (12%) as least commonly stated reason cost of travel (229, 49.2%) and obtaining travel visas (191, 41.1%) were the leading barriers to attending Academy meetings.

Although, at the time of this survey, most of the respondents (233, 77.2%) intended to apply for the Fellowship, an overwhelming proportion (248, 82.1%) did not know the process for obtaining the Fellowship. Regarding the perceived benefit from the fellowship, many felt that a FAAO would enhance their professional development (285, 47.3%) and social/professional status (197, 32.7%).

There were different reasons for not applying for membership/fellowship of the Academy before this time as reported by the respondents. These are presented in Figure 2. These were mainly a lack of knowledge of the process of obtaining the fellowship and cost implications.

The majority of the respondents reported that mentorship (273, 90%), having access to journal articles (225, 74.5%), and information sessions (215, 71.2%) organized on available resources were needed to assist in composing case reports, whereas others noted the need to have samples case reports (209, 69.2%) and expanded scope of journals/presentations (181, 59.9%).

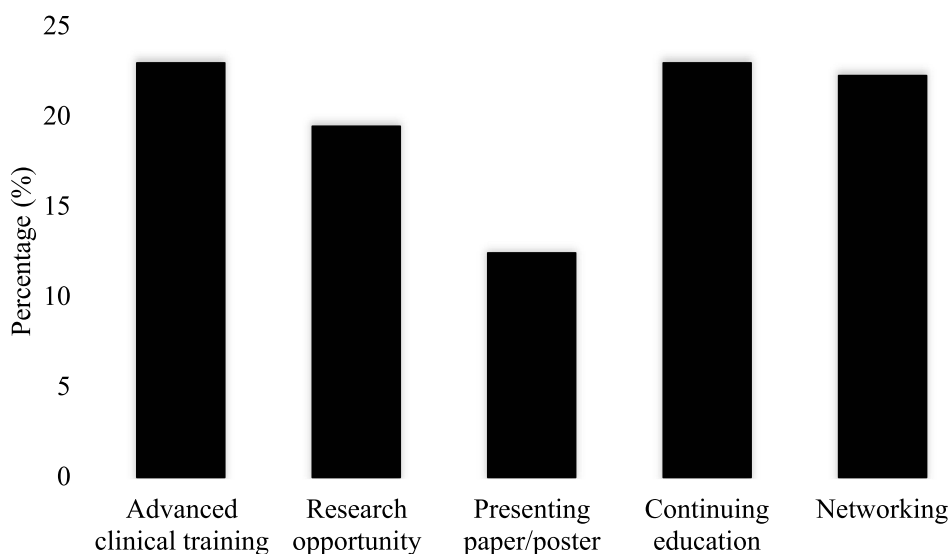


Figure 1 Reasons for wanting to attend the Academy meeting.

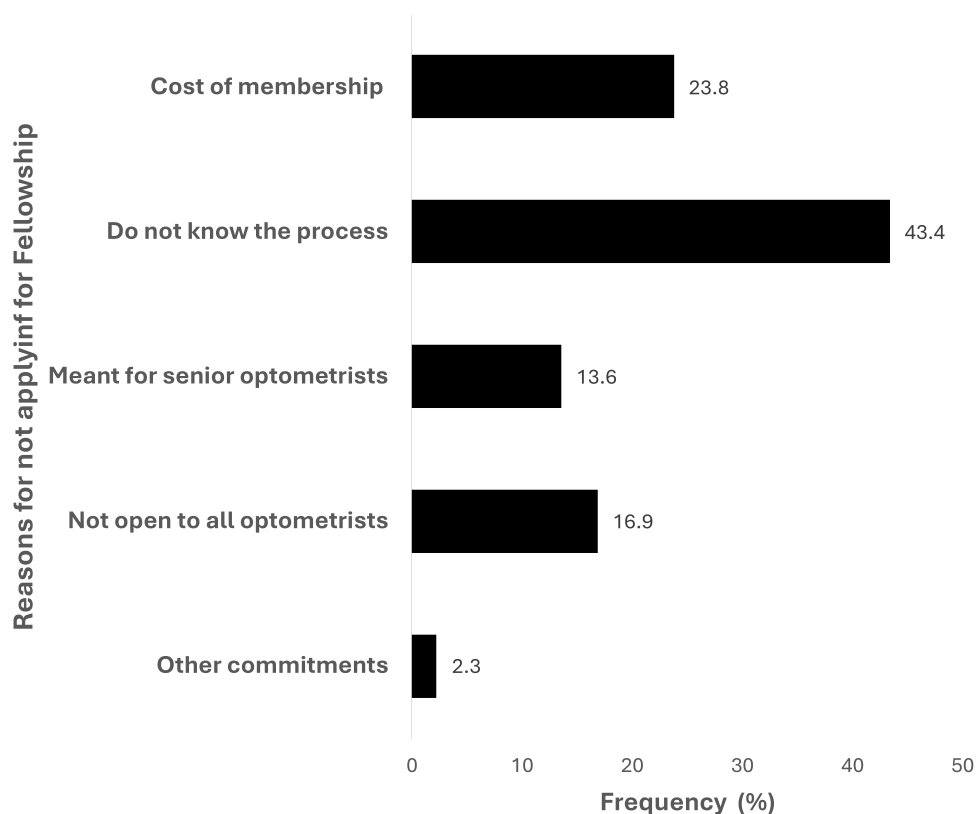


Figure 2 Reasons for not applying for membership/fellowship of the American Academy of Optometry.

Responses on the Establishment of the AAO-African Chapter of

Since the WhatsApp group had existed before the official recognition of the African chapter, the respondents were asked if they were aware of the existence of the chapter prior to joining the group. Of the respondents in this session ($n = 300$), about one-third (101, 33.7%) were aware of the establishment of the chapter before joining the WhatsApp group and nearly all the

respondents (279, 93.0%) want to be official members of the chapter. A high proportion voted in favor of establishing different national chapters of the AAO (221, 73.9%), but most were unaware of the new Nigerian Chapter (269, 90.3%) (Table 2).

Discussion

Following the formal launch of the African Chapter of the AAO in October 2023, there was a renewed interest among African Optometrists to obtain the FAAO. This paper sought to investigate awareness of the process for obtaining the FAAO among African optometrists and their perception of the newly established African Chapter for progressing the profession in the continent. The main finding was that the primary source of knowledge about the FAAO was by dissemination through word of mouth, underlining the potential limitation in the transmission of such critical information within the optometric community. While the study revealed a remarkable intention among over 90% of respondents to apply for the FAAO, significant barriers to FAAO attainment were identified. A notable proportion expressed unawareness of the process, which underlines a pervasive challenge. The identified barriers included financial constraints, a misconception that the Fellowship is exclusive to senior and academic optometrists, and a general lack of awareness of the procedural steps involved.

Ignorance of the process was cited as the biggest barrier to obtaining the FAAO. The significance of this lack of awareness among African Optometrists is profound. Unfamiliarity with the FAAO process might preclude optometrists from accessing valuable opportunities for continuous professional development offered by the AAO. Furthermore, exclusion from the global network of optometrists dedicated to the highest professional standards^{8,9} could impede knowledge exchange, subsequently impacting patient care and clinical outcomes. Optometrists who are uninformed about the FAAO process may miss out on opportunities to enhance their clinical abilities, especially in this increasingly multicultural society,⁸ potentially affecting the quality of care provided to their patients. It is worth noting that most of the respondents had a fair idea of the benefits that membership and Fellowship of the AAO afford and there is a willingness to obtain the FAAO.

The establishment of the AAO - African Chapter and subsequent outreach through a WhatsApp group proved to be a robust strategy, especially since there was no joining cost. Over 600 African optometrists joined the group in a short period (4 weeks) and have grown to 658 within 6 weeks, showcasing a rapid and enthusiastic response. Before this initiative, over two-thirds of the respondents were unaware of the African Chapter, reflecting the efficacy of targeted communication channels. The overwhelming interest expressed by 93% of respondents in joining the African Chapter signifies a collective commitment to advancing optometric excellence on the continent. This collective commitment is encouraging for the prospects of professional development, collaboration, and alignment with global standards within the practicing optometric community.¹⁰ The majority indicated support for the establishment of national Chapters besides the African Chapter. The reason for this was that the establishment of country chapters would engender accessibility and easier networking opportunities. The desire for country chapters further emphasizes the importance of accessibility and networking in fostering a cohesive optometric community. The implications of these findings are promising, indicating a potential surge in knowledge-sharing, networking, and collective efforts to address region-specific challenges.

The findings of this study hold profound significance for the field of optometry in Africa. The study underscores the need for heightened awareness and understanding of the FAAO process among African optometrists. Despite the distinguished nature of FAAO, and the fact that most African optometry associations are active members of the World Council of Optometry, a global body that promotes and cohosts events with the Academy,⁹ there exists a critical awareness deficit that demands urgent attention. This insight, which was similar to the findings from a recent report presented at the 2023 Annual Academy meeting in New Orleans, underscores the need for increased awareness and understanding of the FAAO process. Optometrists in this study displayed strong enthusiasm for the profession, motivation, and purposeful practice by their decision to embark on the fellowship journey and these personal attitudes facilitate the advancement of the practice.¹¹

Limitations and Strengths

It is pertinent to highlight a few limitations inherent in this survey. The first survey was largely targeted at optometrists practicing in Africa, who have signed up to join a WhatsApp group. Although efforts were made to reach other optometrists beyond the platform, not using a random sample of optometrists in Africa in the survey could impact the generalizability of the results. Secondly, due to the nature of the study design, we are unable to establish any causation. Lastly, the study is exposed to self-report bias since the participants' responses could not be verified. Notwithstanding

these limitations, this is the first study to provide data from African Optometrists about the AAO, one of the most prestigious associations for eyecare specialists globally. The result of this survey provides a general overview of the knowledge and perceptions of African optometrists regarding the membership and Fellowship of the Academy.

Conclusions

In conclusion, the study provides evidence of the untapped potential and keen interest among African optometrists in obtaining the FAAO. The juxtaposition of overwhelming interest among African optometrists in the attainment of FAAO, despite the knowledge gap, presents an opportunity for targeted education and outreach initiatives. The study also demonstrated the pivotal role the AAO-African Chapter can play in advancing the optometry profession on the continent and contribute valuable insights for shaping strategies that enhance awareness, promote professional development, and foster a sense of belonging among African optometrists within the global optometry community. Addressing these deficits will empower aspiring optometrists in their pursuit of professional excellence and elevate the overall standard of optometric practice in Africa. Initiatives focused on disseminating information, demystifying the FAAO process, and providing guidance are pivotal in harnessing this enthusiasm and ensuring that African optometrists contribute significantly to global eye care standards.

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Disclosure

The author(s) report no conflicts of interest in this work.

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