# DR. Charles Darko-takyi

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## RESEARCH

| | |
|---|---|
| Interests | Clinical Optometry · Binocular vision · Ophthalmic Optics · Dispensing Optics |
| Areas | Epidemiology · Ophthalmology · Social Psychology · Cognitive Neuroscience · Radiology, Nuclear Medicine and Imaging · Human-Computer Interaction |

## RESEARCH SUMMARY

| 29 | 233 | 9 | 9 | 0.47 | 0% |
|---|---|---|---|---|---|
| Publications | Citations | h-index | i10-index | Field-weighted impact | World top 10% |

Counted from the 29 publications listed below, 2013–2026. Field-weighted impact is the mean over the 24 works scored for it; 1.00 is the world average for works of the same field, type and year. 0 of the 24 papers scored for it are among the world's most cited tenth for their field, type and year.

## POSITIONS

**Dr. / Optometrist** 2010–present
Optometry, University of Cape Coast, Cape Coast, Ghana

## EDUCATION AND QUALIFICATIONS

**Dr.** 2015–present
Optometry, University of Cape Coast, Cape Coast, Ghana

## PUBLICATIONS

### Journal articles 29

1. Pious Tawiah Amoako, Samuel Kyei, **Charles Darko-Takyi**, Emmanuel Kwasi Abu (2026). Epidemiology of non-strabismic binocular vision anomalies in Africa: a systematic review and meta-analysis. *Clinical and Experimental Optometry*. https://doi.org/10.1080/08164622.2026.2722996
2. **Charles Darko-Takyi**, Ebenezer Manu, Victoria Yirrah, Sandra Owusu, Kumi Owusu Boakye, Carl Halladay Abraham, Kwame Okyere Osei (2026). Normative data for accommodative facility and vergence facility in a sample of African school children aged 8–17 years. *Frontiers in Neuroscience*. https://doi.org/10.3389/fnins.2026.1742375
3. Enyam K.A. Morny, Emmanuel Adator, Carl Halladay Abraham, Dillys A.D. Amega, Solomon Edziah, Fidelis Kuebutornye, Kojo Essel-Amoah, Stephen Ocansey, **Charles Darko-Takyi**, Michael Ntodie, Selina Holdbrook, Obed Amoah-Smith, Stephen Moore, Louise Terry (2026). Profiling visual health of young adults in Ghana: a university-based eye screening survey. *Data in Brief*. https://doi.org/10.1016/j.dib.2026.113202
4. Carl Halladay Abraham, Alhassan Osman, Godfred Sakyi-Badu, **Charles Darko-Takyi**, Emmanuel Addai, Fusiena Safianu, Emmanuella Nyarkoa Opoku, Asantewaa Aboagye-MacCarthy, Emmanuel Adator, Enyam Komla Amewuho Morny (2026). Smartphone Near-Viewing Demands Differ in Corrected Presbyopes: Implication for Presbyopic Correction. *Ophthalmic and Physiological Optics*. https://doi.org/10.1007/s44402-026-00168-3

5. **Charles Darko-Takyi**, Youfegan B. Mathurin, Emmanuel Essien, Sandra Owusu, Osei A. Yaw Jnr, Kwame O. Osei, Selina Holdbrook, Andrew Owusu-Ansah (2025). Agreement between intraocular pressure measurement using Goldmann applanation tonometry with and without fluorescein in consecutive Ghanaian patients. *Ghana Medical Journal*. https://doi.org/10.4314/gmj.v59i3.4

6. **Charles Darko-Takyi**, Thomas Welbeck Mills, Samuel Bert Boadi-Kusi, Michael Ntodie, Carl Halladay Abraham, Emmanuel Kwasi Abu, Sedinam Amewuzah, Emmanuel Essien, Bright Osei Wiafe, Stephen Ocansey (2025). Association between near visual display device usage and the eye's accommodation and vergence parameters: a cross-sectional study of high school children in Cape Coast, Ghana. *BMJ Public Health*. https://doi.org/10.1136/bmjph-2025-003041

7. **Charles Darko-Takyi**, Sandra Owusu, Emmanuel K. Abu, Carl H. Abraham, Michael Ntodie, Ebenezer Manu, Kumi O. Boakye, Victoria Yirrah, Emmanuel Essien, Kwame O. Osei, Stephen Ocansey (2025). Exploring reduction of prolonged binocular vision testing time: the agreement between the first and second thirty seconds within one minute of accommodative and vergence facility tests. *Strabismus*. https://doi.org/10.1080/09273972.2024.2449178

8. **Charles Darko-Takyi**, Selasie A. Ahlijah, Emmanuel K. Abu, Michael Ntodie, Carl H. Abraham, Franklin L. Otoo, Stephen Ocansey (2025). Exploring the association between asthenopia, vergence measures and the interpupillary distance. *African vision and eye health*. https://doi.org/10.4102/aveh.v84i1.1054

9. **Charles Darko-Takyi**, Kumi Owusu Boakye, Stephen Ocansey, Carl Halladay Abraham, Edward Okyere Kyeretwie, Sandra Owusu, Ebenezer Manu, Victoria Yirrah, Enyam Komla Morny, Emmanuel Essien, Kwame Okyere Osei (2024). No agreement between expected phoropter Risley prism and prism bar fusional vergences in a prospective cross-sectional study of African school children. *Strabismus*. https://doi.org/10.1080/09273972.2024.2419004

10. Carl Halladay Abraham, Godfred Sakyi-Badu, Samuel Bert Boadi-Kusi, Enyam Morny, **Charles Darko-Takyi**, Stephen Ocansey, Paa Kwesi Fynn Hope, Albert Kofi Dadzie, Asantewaa Aboagye MacCarthy, Kingsford Osei-Frimpong, Emmanuella Nyarkoa Opoku, Emmanuel Kwasi Abu (2024). Simulation of visual impairment in persons with normal vision for scientific research. *Ophthalmic and Physiological Optics*. https://doi.org/10.1111/opo.13268

11. Carl Halladay Abraham, Godfred Sakyi-Badu, Samuel Bert Boadi-Kusi, **Charles Darko-Takyi**, Stephen Ocansey, Emmanuel Kwasi Abu, Paa Kwesi Fynn Hope, Albert Kofi Dadzie, Asantewaa Aboagye MacCarthy, Kingsford Osei Frimpong, Emmanuella Nyarkoa Opoku (2024). The comparative benefits of text and page modification on the reading rates between sighted and moderate to severe visually impaired eyes. *British Journal of Visual Impairment*. https://doi.org/10.1177/02646196231225080

12. **Charles Darko-Takyi**, Andrew Owusu-Ansah, Frank Boampong, Enyam Komla Morny, Francisca Hammond, Stephen Ocansey (2021). Convergence insufficiency symptom survey (CISS) scores are predictive of severity and number of clinical signs of convergence insufficiency in young adult Africans. *Journal of Optometry*. https://doi.org/10.1016/j.optom.2021.05.001

13. **Charles Darko-Takyi**, Vanessa R. Moodley, Samuel B. Boadi-Kusi (2021). Normative Data for Nonstrabismic Binocular Vision Parameters in African Schoolchildren. *Optometry and Vision Science*. https://doi.org/10.1097/opx.0000000000001706

14. **Charles Darko-Takyi**, Vanessa R. Moodley, Samuel B. Boadi-Kusi (2021). Normative Data for Parameters of Accommodation in African Schoolchildren. *Optometry and Vision Science*. https://doi.org/10.1097/opx.0000000000001844

15. Stephen Ocansey, Emmanuel K. Abu, Carl Halladay Abraham, Andrews Owusu-Ansah, Caleb Acheampong, Frederick Mensah, **Charles Darko-Takyi**, Alex Ilechie (2021). Socio-demographic factors modify awareness, knowledge, and perceived risk of glaucoma in rural and urban residents in Ghana: a population-based survey. *Therapeutic Advances in Ophthalmology*. https://doi.org/10.1177/2515841421998099

16. **Charles Darko-Takyi**, Vanessa R. Moodley, Samuel B. Boadi-Kusi (2020). A review of normative data for parameters of functional non-strabismic binocular vision. *African vision and eye health*. https://doi.org/10.4102/aveh.v79i1.507

17. Peter Osei-Wusu Adueming, Moses Jojo Eghan, Benjamin Anderson, Samuel Kyei, Jerry Opoku-Ansah,

Charles Lloyd Yeboah Amuah, **Charles Darko Takyi**, Paul Kingsley Buah-Bassuah (2020). Laser-induced autofluorescence assisted by multivariate techniques discriminates a cataractous lens from healthy lens tissues of Sprague–Dawley rats. *Journal of the Optical Society of America A*. https://doi.org/10.1364/josaa.394555

18. SAMUEL BERT BOADI-KUSI OD, Emmanuel Kwasi Abu, Andrew Owusu-Ansah, Shadrack Mensah, John Oduro-Boateng, Rene Abalo Kojo, Samuel Kyei, Samuel Bert Boadi-Kusi, Obed Amoah-Smith, Enyam Komla Amewuho Morny, **Charles Darko-Takyi**, Carl Halladay Abraham, Benjamin Appiah Nyamekye, Alex Azuka Ilechie (2020). Normative Values of Retinal Nerve Fibre Layer Thickness and Optic Nerve Head Parameters and Their Association with Visual Function in an African Population. *Journal of Ophthalmology*. https://doi.org/10.1155/2020/7150673
19. **C Darko-Takyi**, M Ntodie, S Abokyi, S Kyei (2018). Accommodative anomalies in symptomatic school children in Cape Coast Metropolis, Ghana. *Journal of the Nigerian Optometric Association*. https://www.ajol.info/index.php/jnoa/article/view/173691
20. **Charles Darko-Takyi**, Naimah Ebrahim Khan, Urvashni Nirghin (2016). A review of the classification of nonstrabismic binocular vision anomalies. *Optometry Reports*. https://doi.org/10.4081/optometry.2016.5626
21. **Charles Darko-Takyi** (2016). African Vision and Eye Health. *Health*. https://ir.ucc.edu.gh/server/api/core/bitstreams/0fc38d5f-913c-4d0c-b8fa-0524f2a0b845/content
22. **C. Darko-Takyi**, A. Owusu-Ansah, C. Appiah-Eduenu, E.K. Abu, S.B. Boadi-Kusi, Y. Osei-Akoto (2016). Refractive and binocular vision status of optometry students, Ghana. *Journal of Medical and Biomedical Sciences*. https://doi.org/10.4314/jmbs.v5i2.4
23. **Charles Darko-Takyi**, Naimah E. Khan, Urvashni Nirghini (2016). Symptomatic accommodative disorders and asthenopia: Prevalence and association in Ghanaian children. *African vision and eye health*. https://doi.org/10.4102/aveh.v75i1.343
24. **Charles Darko-Takyi**, Kofi Asiedu (2016). Symptomatic classic convergence insufficiency treated with dot card orthoptic exercise. *Optometry Reports*. https://doi.org/10.4081/optometry.2016.5566
25. **Charles Darko-Takyi**, Naimah E. Khan, Urvashni Nirghini (2016). Symptomatic vergence disorders in junior high school children in Ghana. *African vision and eye health*. https://doi.org/10.4102/aveh.v75i1.333
26. EmmanuelKwasi Abu, SamuelBert Boadi-Kusi, PrinceOpuni Quarcoo, Samuel Kyei, Andrew Owusu-Ansah, **Charles Darko-Takyi** (2015). Ocular health and safety assessment among mechanics of the cape coast metropolis, Ghana. *Journal of Ophthalmic and Vision Research*. https://doi.org/10.4103/2008-322x.158890
27. SAMUEL BERT BOADI-KUSI OD, Samuel Kyei, Frederick Afum Asare, Andrew Owusu-Ansah, Agnes Awuah, **Charles Darko-Takyi** (2015). Visual function among commercial vehicle drivers in the central region of Ghana. *Journal of Optometry*. https://doi.org/10.1016/j.optom.2015.06.004
28. Samuel Abokyi, Alex Ilechie, Peter Nsiah, **Charles Darko-Takyi**, Emmanuel Kwasi Abu, Yaw Jnr Osei-Akoto, Mathurin Youfegan-Baanam (2015). Visual impairment attributable to uncorrected refractive error and other causes in the Ghanaian youth: The University of Cape Coast Survey. *Journal of Optometry*. https://doi.org/10.1016/j.optom.2015.04.002
29. Carl Halladay Abraham, **C Darko-Takyi** (2013). Access to and utilization of eye care services in Ghana. *Int J Health Res*. https://www.academia.edu/download/40525446/Access_to_and_Utilization_of_eye_Care_Se20151130-12371-10zsdrh.pdf