

## CV

**Name: Abdulaziz Abdullah Alkathiry, PT, MSc, PhD**

**Nationality: Saudi**

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### **Summary**

- PhD in Rehabilitation Science from the University of Pittsburgh, with specialization in concussion and balance dysfunction.
- Clinical neuro PT experience through weekly outpatient service at Majmaah University Clinical Center.
- Taught neurological rehabilitation modules in the DPT program at Northern Arizona University.
- Conducted research and contributed to publications on concussion and balance at the University of Pittsburgh.
- President and Founder of the Saudi Medical Sensors Association.
- Published over 25 peer-reviewed papers in neurorehabilitation, stroke, concussion, and gait analysis.
- Supervised multiple graduate theses related to stroke rehabilitation and dual-task gait analysis.

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### **Clinical Experience in Neurological Physical Therapy**

**Neurological Physical Therapist (Weekly Clinic) Majmaah University Clinical Center (2017–Present)**

- Manage patients with stroke, concussion, and other neurological impairments.
- Provide evidence-based assessments and individualized rehabilitation plans.

### **PROFESSIONAL EXPERIENCE**

- Associate Professor of Physical Therapy, College of Applied Medical Sciences, Majmaah University, Saudi Arabia (2021 – present)
- President of the Saudi Medical Sensors Association, Saudi Arabia (2021 – present)
- International Visiting Faculty\Scholar, Department of Physical Therapy & Athletic Training, Northern Arizona University, Flagstaff, AZ (2021 - 2023)
- Adjunct faculty, Physical Therapy department, University of Pittsburgh, Pittsburgh, PA (2020 - 2021)
- Board Member of the Health and Basic Sciences Research Center, Majmaah University (2019 - 2022)
- Supervisor of the Cardiopulmonary Resuscitation Unit at Majmaah University (2019 – present)
- Foundation president of the Saudi Medical Sensors Association (2019 – 2020)
- Vice Dean for Development and Quality, College of Applied Medical Sciences, Majmaah University, Saudi Arabia (2018 – 2020)
- Head of Master of Science in Biomedical Engineering Program, College of Applied Medical Sciences, Majmaah University, Saudi Arabia (2017 – 2019)
- Head of Medical Equipment Technology Department, College of Applied Medical Sciences, Majmaah University, Saudi Arabia (2017 – 2019)
- Assistant Professor of Physical Therapy, College of Applied Medical Sciences, Majmaah University, Saudi Arabia (2017 – 2021)
- Lecturer of Physical Therapy, College of Applied Medical Sciences, Majmaah University, Saudi Arabia (2016 – 2017)
- Scholarship holder from Majmaah University, Saudi Arabia, to fulfill Master and PhD studies in University of Pittsburgh, PA, USA (2009 – 2016)

## Academic

1. Ph.D in Physical Therapy, December 2016, University of Pittsburgh, Pittsburgh, PA, USA  
Dissertation: The Effect Of Recent Concussion On Balance During Single And Dual Tasks In Adolescents
2. Master in Physical Therapy, December 2011, University of Pittsburgh, Pittsburgh, PA, USA
3. Bachelor in Physical Therapy, December 2008, King Saud University, Riyadh, Saudi Arabia

## Supervision of Published Master thesis

1. Assessment of Knowledge, Attitude and Practice of Physical Therapists Regarding Constraint-Induced Movement Therapy for Patients with Stroke in Saudi Arabia, By the student Hanan Menawer Flah Alzabni under supervision of Dr. **Abdulaziz Abdullah Alkathiry**. (2025)
2. Exploring Physical Therapists' Knowledge, Attitudes, and Practices Toward Virtual Reality Interventions for Patients with Neurological Disorders in Saudi Arabia, By the student Ashwag Alnwamsy under supervision of Dr. **Abdulaziz Abdullah Alkathiry**. (2025)
3. Aerobic Exercises Prescription in Stroke Rehabilitation: A Survey Among Physical Therapists in Saudi Arabia, By the student Abdullah Shabab Nasser Alrashidi under supervision of Dr. **Abdulaziz Abdullah Alkathiry**. (2024)
4. Comparing Home-Based Rehabilitation With Outpatient Rehabilitation For Patients With Stroke, By the student Raghad Sameer Alkhodidi under supervision of Dr. **Abdulaziz Abdullah Alkathiry**. (2023)
5. The Effect of Family Support During Physical Therapy Sessions on the Outcomes of Patients with Stroke, By the student Aseel Abdulmohsen Suliman Al-Olaywi under supervision of Dr. **Abdulaziz Abdullah Alkathiry**. (2023)
6. Knowledge, Attitude, and Practice Among Physical Therapists in Saudi Arabia Towards the Use of Dry Needling on Spasticity in Patients with Stroke, By the student Saleh Ahmed Abuaraigah under supervision of Dr. **Abdulaziz Abdullah Alkathiry** and Dr. Shady Abdullah Alshewaier. (2022)
7. Determining Dual-Tasks Difficulty During Walking in Healthy Adults, By the student Jaser Saad Almutairi under supervision of Dr. **Abdulaziz Abdullah Alkathiry** and Dr. Shady Abdullah Alshewaier. (2021)
8. Cross cultural adaptation and validation of VISA-A questionnaire for Arabic (Saudi Arabia) patients with Achilles tendinopathy, By the student Raed Motaeb ALotaibi under supervision of Dr. **Abdulaziz Abdullah Alkathiry** and Dr. Shady Abdullah Alshewaier. (2021)
9. Arabic translation and cross-cultural adaptation of the Victorian Institute of Sport Assessment for patellar tendinopathy (VISA-P) for use in Saudi Arabia, By the student Abdulrahman Saud Abdulmohsen Alshabanat under supervision of Dr. **Abdulaziz Abdullah Alkathiry** and Dr. Shady Abdullah Alshewaier. (2021)
10. Low-Cost Portable Tool Kit For Converting Any Kind Of Medical Wheelchairs Into Electrical Wheelchairs, By the student Ahmed Thuwayban Al-Mutairi under supervision of Dr. Mohamed Abdelkader Aboamer and Dr. **Abdulaziz Alkathiry**. (2020)
11. WAVELET-BASED SEMBLANCE ANALYSIS AND RECONSTRUCTION OF DUAL TASKING GAIT DYNAMICS IN PARKINSON'S DISEASE SUBJECTS, By the student Abdulrahman Khalid Alhaidar under supervision of Dr. Mohamed Yacin Sikkandar and Dr. **Abdulaziz Alkathiry**. (2019)

## Publications

1. **Abdulaziz A Alkathiry** (2025). Key Accelerometry Measures for Understanding Walking Sway during Dual-Task Exercises. Heliyon, Volume 11, Issue 4, e42160
2. Jaser S Almutairi, Shady A Alshewier, **Abdulaziz A Alkathiry** (2025). Ranking the difficulty of the cognitive tasks in Dual-Tasks during walking in healthy adults. Neurosciences Journal 30 (2), 124-130
3. **Abdulaziz A Alkathiry** (2024). Predictors of Stroke Recovery: A Cross-Sectional Study. Majmaah Journal of Health Sciences 12 (4), 61-61
4. **Abdulaziz A Alkathiry**, SF Alsubaie, MA ALMohiza, F Asiri (2024). Translation and Cross-cultural Adaptation of the Postural Assessment Scale for Stroke in Arabic-speaking Population with Stroke. Journal of Disability Research 3 (7), 20240087

5. SA Alshewaier, RM Alotaibi, AS Alshabanat, **Abdulaziz A Alkathiry** (2024). Cross-Cultural Adaptation, Translation, and Validation of the Victorian Institute of Sport Assessment-Achilles Questionnaire (VISA-A) for Use With Arabic-Speaking Patients With Achilles Tendinopathy. *Orthopaedic Journal of Sports Medicine* 12 (6), 23259671241252649
6. **Abdulaziz A Alkathiry** (2024). Relationship between severity of concussion's symptoms and functional performance in children. *Brain injury*, 1-5
7. SF Alsubaie, **Abdulaziz A Alkathiry**, MI Aljuaid, MA Alnasser (2024). The relationship between chronic diseases and the intensity and duration of low back pain. *European Journal of Physical and Rehabilitation Medicine* 60 (1), 55
8. JD Heick, **Abdulaziz A Alkathiry** (2024). Impact of concussions on postural stability performance using the head shake-sensory organization test. *International journal of sports physical therapy* 19 (1), 1454
9. **Abdulaziz A Alkathiry** (2023). Characteristics of the Functional Gait Assessment in adolescents with concussion. *Neurosciences* 28 (3), 165-169
10. AS Alshabanat, SA Alshewaier, RM Alotaibi, **Abdulaziz A Alkathiry** (2022). Arabic Translation and Cross-Cultural Adaptation of the Victorian Institute of Sport Assessment Questionnaire for Patellar Tendinopathy. *Orthopaedic Journal of Sports Medicine* 10 (11)
11. M Ateef, M Alqahtani, M Alzhrani, **Abdulaziz A Alkathiry**, A Alanazi, SA Alshewaier (2022). A Systematic Review of Psychometric Properties of Knee-Related Outcome Measures Translated, Cross-Culturally Adapted and Validated in Arabic Language. *Healthcare* 10 (9), 1631
12. **Abdulaziz A Alkathiry**, Alsubaie, S. F., Alsalaheen, B. A., & Whitney, S. L. (2022). Validation of the Gait Disorientation Test in children with concussion. *Frontiers in Pediatrics.*, 10. <https://doi.org/10.3389/fped.2022.927708>
13. Sikkandar, M. Y., Begum, S. S., **Abdulaziz A Alkathiry**, Alotaibi, M. S. N., & Manzar, M. D. (2022). Automatic Detection and Classification of Human Knee Osteoarthritis Using Convolutional Neural Networks. *CMC-COMPUTERS MATERIALS & CONTINUA*, 70(3), 4279-4291.
14. Eagle, S. R., Sparto, P. J., Holland, C. L., **Abdulaziz A Alkathiry**, Blaney, N. A., Bitzer, H. B., Collins, M. W., Furman, J. M., & Kontos, A. P. (2021). Utility of a Postural Stability/Perceptual Inhibition Dual Task for Identifying Concussion in Adolescents, *Journal of Sport Rehabilitation*
15. **Abdulaziz A Alkathiry** (2021). Effect of migraine on functional performance and self reported symptoms in children with concussion: A cross-sectional study. *JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH*. <https://doi.org/10.7860/jcdr/2021/49354.14928>
16. Alsubaie, S. F., Abdelbasset, W. K., **Abdulaziz A Alkathiry**, Alshehri, W. M., Azyabi, M. M., Alanazi, B. B., Alomerani, A. A., & Asiri, F. Y. (2021). Anterior cruciate ligament injury patterns and their relationship to fatigue and physical fitness levels - a cross-sectional study. *Medicine*, 100(1), e24171. <https://doi.org/10.1097/MD.00000000000024171>
17. Sikkandar, M.Y., Sabarunisha Begum, S., **Abdulaziz A Alkathiry** et al. Segmentation of human knee osteoarthritis images using unsupervised local center of mass computation technique. *J Ambient Intell Human Comput* (2021). <https://doi.org/10.1007/s12652-021-03053-8>
18. Saud F. Alsubaie, **Abdulaziz A. Alkathiry**, Walid Kamal Abdelbasset, Gopal Nambi, "The Physical Activity Type Most Related to Cognitive Function and Quality of Life", *BioMed Research International*, vol. 2020, Article ID 8856284, 7 pages, 2020. <https://doi.org/10.1155/2020/8856284>
19. Nambi, G., Abdelbasset, W. K., Alsubaie, S. F., Saleh, A. K., Verma, A., Abdelaziz, M. A., & **Abdulaziz A Alkathiry**. (2020). Short-Term Psychological and Hormonal Effects of Virtual Reality Training on Chronic Low Back Pain in Soccer Players, *Journal of Sport Rehabilitation*, 1-10.
20. **Abdulaziz A. Alkathiry** (2020) Relationship Between Sitting Duration During Working Days and Level of Physical Performance. *Majmaah Journal of Health Sciences*, 8 (3), 105-114. doi:10.5455/mjhs.2020.03.011
21. R. Alhaidar, M. Y. Sikkandar and **Abdulaziz A Alkathiry**, "Reconstruction of Dual Tasking Gait Pattern in Parkinson's Disease Subjects Using Radial Basis Function Based Artificial Intelligence", *Journal of intelligent and fuzzy systems* (2020).
22. Alshehri MM, **Abdulaziz A Alkathiry**, Alenazi AM, Alothman SA, Rucker JL, Phadnis MA, Miles JM, Kluding PM, Siengsukon CF. Sleep Efficiency and Total Sleep Time in Individuals with Type 2 Diabetes with and without Insomnia Symptoms. *Sleep Disord*. 2020 Jul 17;2020:5950375. doi: 10.1155/2020/5950375. eCollection 2020. PMID: 32724680

23. R. Alhaidar, M. Y. Sikkandar and **Abdulaziz A Alkathiry**, "Wavelet-based Semblance Analysis of Gait Dynamics in Parkinson's Disease," 2019 8th International Conference on Modeling Simulation and Applied Optimization (ICMSAO), Manama, Bahrain, 2019, pp. 1-5. doi: 10.1109/ICMSAO.2019.8880356
24. **Abdulaziz A Alkathiry**, Kontos AP, Furman JM, Whitney SL, Anson ER, Sparto PJ. (2019) Vestibulo-Ocular Reflex Function in Adolescents With Sport-Related Concussion: Preliminary Results. 2019 Aug 14:1941738119865262. doi: 10.1177/1941738119865262.
25. **Abdulaziz A Alkathiry**, Sparto PJ, Freund B, Whitney SL, Mucha A, Furman JM, Collins MW, Kontos AP. (2018) Using Accelerometers to Record Postural Sway in Adolescents With Concussion: A Cross-Sectional Study. J Athl Train. 2018 Dec;53(12):1166-1172. doi: 10.4085/1062-6050-518-17. Epub 2019 Jan 3. PubMed PMID: 30605371.
26. Pavlou M, Whitney SL, **Abdulaziz A Alkathiry**, Huett M, Luxon LM, Raglan E, Godfrey EL and Bamiou DE (2017) Visually Induced Dizziness in Children and Validation of the Pediatric Visually Induced Dizziness Questionnaire. Front. Neurol. 8:656. doi: 10.3389/fneur.2017.00656
27. Pavlou, M; Whitney, S; **Abdulaziz A Alkathiry**; Huett, M; Luxon, L; Raglan, E; Godfrey, E; Bamiou, D. The Pediatric Vestibular Symptom Questionnaire: A Validation Study.(2016) The American Academy of Pediatrics

### **Book chapter**

1. **Abdulaziz A Alkathiry**, Sparto PJ, Kontos AP, Furman JM. (2019) Vestibular Dysfunction Associated With Mild Traumatic Brain Injury (mTBI). Academic Press. <https://doi.org/10.1016/B978-0-12-812344-7.00010-8>

### **Conferences**

1. **Abdulaziz Alkathiry**, Lecture titled "*Evolutionary Trend in Concussion Rehabilitation*" at the Future of Rehabilitation Conference at King Abdulaziz Medical City, Riyadh, Saudi Arabia (2024)
2. **Abdulaziz Alkathiry**, Lecture titled "*Sport-related concussion*" at the International Conference of Rehabilitation, Sport, Orthopedic Trauma at Majmmah University, Saudi Arabia (2024)
3. **Abdulaziz Alkathiry**, Marousa Pavlou, Susan Whitney. Concussion Severity and Functional Performance in Concussed Children with Dizziness. APTA Combined Sections Meeting (CSM). San Antonio, TX, USA. (2022)
4. Heick J, Burdett K, **Alkathiry A**. THE EFFECT OF ADDING A FOAM SURFACE CONDITION TO THE HEAD SHAKE SENSORY ORGANIZATION TEST IN HEALTH AND CONCUSSED ADULTS. 2022 IJSPT Orthopedic Summit Research Abstracts. Boston, MA, USA. (2022)
5. **Alkathiry AA**, Kontos AP, Furman JM, Whitney SL, Sparto PJ., Saud F. Alsubaie. Dual-task Elicits Decreased Balance Performance in Adolescents following Sport-related Concussion. (2020) ISPRM World Congress and AAP Annual Meeting
6. **Abdulaziz Alkathiry**; Patrick Sparto; Susan Whitney; Joseph Furman; Anthony Kontos. Single vs Dual-task balancing paradigm in Adolescents with Sport Related Concussion. Conference: Combined Sections Meeting (CSM) of the American Physical Therapy Association (2016)
7. **Alkathiry, A**; Sparto, P; Mucha, A; Shuman, V; Pavlou, M; Whitney, S. Learning difficulties in concussed children. Conference: Combined Sections Meeting (CSM) of the American Physical Therapy Association (2015)
8. **Alkathiry, A**; Sparto, P; Freund, B; Whitney, S; Mucha, A; Furman, J; Kontos, A. Using Accelerometers to Measure Postural Sway in Children with Concussion. Conference: Combined Sections Meeting (CSM) of the American Physical Therapy Association (2014)