

## **Susan Zacharia**

Virginia Commonwealth University,  
Department of Kinesiology and Health Sciences,  
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### **Education**

Degree: *Doctor of Philosophy*  
Major Area: Health Promotion  
Institution: The University of Oklahoma; Norman, OK  
Date Conferred: August 2015  
Dissertation Title: *“The effects of an 8-week Yoga exercise program and relapse prevention program on physical function, pain, balance, strength, flexibility, physical activity and predictors of exercise in middle aged adults with osteoarthritis”*

Degree: *Master of Science*  
Major Area: Health Promotion  
Institution: The University of Oklahoma; Norman, OK  
Date Conferred: August 2010  
Thesis Title: *“The effects of an 8-week Tai-Chi exercise program on balance and physical function in middle aged women”*

Degree: *Master of Science*  
Major Area: Bioinformatics  
Institution: Bharathidasan University; Tamil Nadu, India  
Date Conferred: April 2005  
Thesis Title: *“Cluster- A software for cluster analysis”*

### **Professional Experiences**

*Virginia Commonwealth University, Richmond, VA*: January 2017- Present  
Assistant Professor  
Department of Kinesiology and Health Science

*Minnesota State University, Mankato, MN*: August 2015 - May 2016  
Assistant Professor  
Department of Health Science

*University of Oklahoma, Norman, OK*: January 2011 - May 2015  
Graduate Teaching/Research Assistant  
Department of Health and Exercise Science.

*University of Oklahoma, Norman, OK*: August 2008 - May 2010  
Graduate Teaching/Research Assistant  
Department of Health and Exercise Science.

## Teaching Experience

*Assistant Professor, Department of Kinesiology & Health Sciences; Virginia Commonwealth University, VA –*

HPEX 352                      Substance Abuse  
HPEX 354                      Coping & Adaptation

*Assistant Professor, Department of Health Science; Minnesota State University, MN -*

HLTH-101                      Health and Environment  
HLTH-380W                      Health Education Planning, Implementing and Evaluating  
HLTH-477                      Behavior Change Foundations and Strategies

*Graduate Teaching/Research Assistant, Health & Exercise Science; University of Oklahoma, OK -*

HES-1823                      Scientific Principles of Health and Disease  
HES-2913                      Personal Health  
HES-1221                      Individual Fitness

## Certifications / Scholarships

**Certified Health Education Specialist (CHES),**

*National Commission for Health Education Credentialing, 2016*

**Cardio-Pulmonary Resuscitation Certificate (CPR BLS - Adult/Child/Infant),**

*American Academy of CPR and First Aid, Inc.*

**Graduate Teaching/Research Assistant, University of Oklahoma**

(Masters/Doctoral Student): 2008-2015

## Professional Memberships

**American Public Health Association**, Affiliate member, 2012-Present

**American College of Sports Medicine**, Affiliate member, 2011-Present

**HonorSociety.org**, Affiliate member, 2013-Present

## Research Interests

Using complementary and alternative medicine (CAM) as a supportive treatment therapy for cardiovascular diseases, arthritis and other chronic diseases

Developing and implementing comprehensive lifestyle interventions to increase physical activity level and decrease chronic disease risk

Improving balance and physical functional performance among middle-aged and older adults to reduce the risk of falls and facilitate independent living and healthy aging.

## Major Projects

- **THE EFFECTS OF AN 8-WEEK YOGA EXERCISE AND RELAPSE PREVENTION PROGRAM ON PAIN, BALANCE, PHYSICAL FUNCTION, FLEXIBILITY,**

### **EXERCISE ADHERENCE AND PREDICTORS OF EXERCISE IN ADULTS WITH OSTEOARTHRITIS**

- An eight-week Yoga exercise followed by a relapse prevention program was performed on adults aged between 40 and 65 with lower extremity osteoarthritis.
- Participant's postural sway, strength, flexibility, physical function, pain, and physical activity level were measured before and after the intervention to determine the impact of Yoga exercise.
- Participant's exercise self-efficacy, exercise intention and social support for exercise and increase in the rate of continued participation in yoga exercise adherence was measured to determine the impact of relapse prevention program.
- The data analysis was done using SPSS version 20.0 (Statistical Packages for Social Sciences).

### ➤ **SUBSTANCE USE IN BLANCHARD YOUTH**

- A one-time individual and group interview (focus group) with middle and high school students on prescription drug abuse.
- A one-time structured interview with key informants in the community lasting 30 minutes.
- The qualitative data analysis was done using NVivo 10.

### ➤ **PERCEIVED EXERCISE BARRIERS AND BENEFITS IN ADULTS WITH OSTEOARTHRITIS**

- A face-to-face structured interview (qualitative method) lasting 30-45 minutes was conducted on adults aged 40-55 years with osteoarthritis both exercisers (at least 150 minutes of moderate exercise a week) and non-exercisers (less than 150 minutes of moderate exercise) to explore the participant's opinions/feelings/experience.
- The qualitative data analysis was done using NVivo 10.

### ➤ **THE EFFECT OF AN 8-WEEK WALKING AND DIETRAY PROGRAM ON PHYSICAL ACTIVITY LEVEL, BALANCE, PHYSICAL FUNCTION, SELF-EFFICACY, SOCIAL SUPPORT, AND INTENTION ON ADULTS WITH TYPE II DIABETES AND CVD**

- An eight-week walking and dietary intervention was performed on adults aged between 45 and 65.
- Participant's balance, physical functional performance, physical activity level and exercise predictors were measured before and after the intervention
- Participants were encouraged to walk 10,000 steps a day and also received an email and a phone call every week for 8 weeks providing encouragement and guidance on how to reach their weekly exercise goal.
- The data analysis was done using SPSS version 18.0 (Statistical Packages for Social Sciences).

### ➤ **THE EFFECTS OF AN 8-WEEK TAI CHI EXERCISE PROGRAM ON BALANCE AND PHYSICAL FUNCTION IN MIDDLE AGED WOMEN**

- An eight-week Tai Chi intervention was performed on middle aged women aged between 45 and 65.

- Participant's postural sway, physical functional performance and physical activity level was measured before and after the intervention to determine the impact of Tai Chi exercise.
- Postural sway was measured using NeuroCom Balance Master and physical functional performance was measured using CS-PFP (Continuous Scale Physical Functional Performance-10)
- The data analysis was done using SPSS version 17.0 (Statistical Packages for Social Sciences).

## Scholarly Activities

### A. Articles in Peer-reviewed Journal

1. **Zacharia, S.**, Taylor, E. L., Hofford, C., Brittain, D., & Branscum, P. (2013). Effects of an 8-week Tai Chi exercise program on physical functional performance in middle-aged women. *Journal of Applied Gerontology*. 34(5), 573-589.  
doi: 10.1177/0733464813504491
2. **Zacharia, S.**, Funk, M., Alshuwaiyer, G., Gwin, S., Taylor, E. L., & Branscum, P. (2013). Internet-based physical activity interventions at the worksite: A systematic review. *American Journal of Health Studies*. 28(3), 114-126.

### B. Publication currently under review

1. **Zacharia, S.**, Taylor, E. L., Hofford, C., Brittain, D., & Branscum, P. Effects of an 8-week Tai Chi exercise program on balance in middle-aged women. *Journal of Geriatric Physical Therapy*.
2. **Zacharia, S.**, Taylor, E. L., & Branscum, P. Effects of weight loss in overweight/obese older adults with knee osteoarthritis: A systematic review. *OA Arthritis*.

### C. Manuscript in Preparation

1. **Zacharia, S.**, Taylor, E. L., Hofford, C., Branscum, P & Cheney, M. Effects of an 8-week yoga exercise program on pain and physical function in adults with osteoarthritis. *To be submitted to Journal of Aging and Physical Activity*.

### D. Peer Reviewed Published Abstracts & Presentations at National Conferences

1. Alshuwaiyer, G., Funk, M., **Zacharia, S.**, Taylor, E. L., Gwin, S., Ayers, D., Garcia M.C., Bemben, M. (2013, May). The effect of an 8-week theory-based walking program on physical activity level and risk factors for cardiovascular disease (Poster Presentation). Published abstract in the official journal of the American College of

- Sports Medicine's Annual Meeting, USA, 60<sup>th</sup> Annual Meeting, Session D-33. S312 Vol. 45 (5) Supplement.
2. **Zacharia, S.**, Taylor, E. L., Hofford, C., Brittain, D., & Branscum, P. (2012, October). Effects of an 8-week Tai Chi exercise program on physical functional performance in middle-aged women (Oral Presentation). Published abstract in the Proceedings of the American Public Health Association's Annual Meeting, USA, 140<sup>th</sup> Annual Meeting, Oral Session 3410.1. (Abstract available from <https://apha.confex.com/apha/140am/webprogram/Paper257233.html>)
  3. Funk, M., **Zacharia, S.**, Alshuwaiyer, G., Gwin, S., Taylor, E. L., & Branscum, P. (2012, October). Internet-based physical activity interventions at the worksite: A systematic review (Poster Presentation). Published abstract in the Proceedings of the American Public Health Association's Annual Meeting, USA, 140<sup>th</sup> Annual Meeting, Poster Session 3097. (Abstract available from <https://apha.confex.com/apha/140am/webprogram/Paper257246.html>)
  4. Funk, M.D., Alshuwaiyer, G., **Zacharia, S.**, Taylor, E.L. (2012 September). Effects of an 8-week walking intervention on physical activity and anthropometric measures in inactive middle aged women (Poster Presentation). Published abstract in The Obesity Society 30<sup>th</sup> Annual Scientific Meeting, USA.
  5. **Zacharia, S.**, Taylor, E. L., Hofford, C., & Brittain, D. (2011, June). Effects of an 8-week Tai Chi exercise program on balance and physical functional performance in middle-aged women (Poster Presentation). Published abstract in the official journal of the American College of Sports Medicine's Annual Meeting, USA, 58<sup>th</sup> Annual Meeting, Session F-32. S574 Vol. 43 (5) Supplement.

### **Grant Experience**

Research grant funds for Doctoral Dissertation (2015), funded by The University of Oklahoma, Robberson Research and Creative Endeavors Grant, \$1000.00.

Travel grant funds to present at the American College of Sports Medicine's 60th Annual Meeting (2013), funded by The University of Oklahoma, Graduate Student Senate, \$750.00.

Travel grant funds to present at the American Public Health Association's Annual Meeting, USA, 140<sup>th</sup> Annual Meeting (2012), funded by The University of Oklahoma, Graduate Student Senate, \$750.00

Travel grant funds to present at the American Public Health Association's Annual Meeting, USA, 140<sup>th</sup> Annual Meeting (2012), funded by The University of Oklahoma, Robberson Travel Grant, \$500.00.

Travel grant funds to present at the American College of Sports Medicine's 58th Annual Meeting (2011), funded by The University of Oklahoma, Graduate Student Senate, \$292.80.