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**EDUCATION**

Baccalaureate: Nanjing Normal University, Nanjing, China;  
B.S. in Physical Education, 1982.

Graduate: - Shanghai Institute of Physical Education, Shanghai, China;  
M.S. in Exercise Physiology, 1985.  
  
- University of Wisconsin-Madison;  
Ph.D. in Physical Education (specializing in Measurement and Evaluation;  
Minor in Educational Psychology), 1990.

**ACADEMIC POSITIONS**

1985-1986	Lecturer in Exercise Physiology	Shanghai Institute of Physical Education, China
1986-1990	Teaching/Research Assistant	University of Wisconsin-Madison
1987-1990	Instructor of Workshop - Oriental Health Regime	Mini Course University of Wisconsin-Madison
1988	Instructor of Workshop - Physical Fitness	University of Wisconsin-Madison
1988-1990	Instructor of Workshop - Oriental Health Regime	University of Wisconsin-Madison
1990-1993	Visiting Assistant Professor	Wayne State University
1994-1998	Assistant Professor	Wayne State University
1998-1999	Associate Professor	Wayne State University
1999-2008	Associate Professor	University of Illinois, Urbana-Champaign
2008-current	Professor	University of Illinois, Urbana-Champaign

1995	Visiting Lecturer	Korean National University of Physical Education
1998	Visiting Lecturer	Shanghai Institute of Physical Education, China
2000	Visiting Lecturer	Korean National University of Physical Education
2004	Visiting Lecturer	Porto University, Portugal
2004-current	Visiting Professor	Guangzhou Institute of Physical Education, China
2004-current	Visiting Professor	Shanghai Institute of Physical Education, China
2007-current	Visiting Professor	Nantong University, China

### **PROFESSIONAL SOCIETY MEMBERSHIPS**

1984-1986	Chinese Sports Medicine Association.
1986-current	American Alliance for Health, Physical Education, Recreation and Dance.
1988-current	American Educational Research Association.
1988-current	Rasch Measurement SIG, American Educational Research Association.
1989-current	National Council on Measurement in Education.
1990-1999	Michigan Association for Health, Physical Education, Recreation and Dance.
1990-current	American College of Sports Medicine.
1991-1996	Association for the Advancement of Computing in Education.
1991-current	The Psychometric Society.
1992-1996	American Public Health Association.
1992-current	American Statistical Association.
1994-1998	International Society for Measurement and Evaluation.

### **HONORS/AWARDS**

1985	"National Sports Science Award," Chinese Sport Science Association, Beijing, China.
1993	"President's Service Bonus Award," Wayne State University.
1994	"Physical Fitness Research Award," Amateur Athletic Union of the United States.
1995	"Fellow," the Research Consortium, American Alliance for Health, Physical Education,

- Recreation and Dance (AAHPERD).
- 1998 “Fellow,” American College of Sports Medicine (FACSM).
- 2001 “Recognition and Appreciation for Contributions to the Research Consortium,” Research Consortium, AAHPERD.
- 2001 “Fellow, The National Center for Supercomputing Applications (NCSA),” NACA/UIUC Faculty Fellows Program.
- 2003 “Fellow,” The American Academy of Kinesiology and Physical Education.
- 2004 “Measurement Honor Award,” The Measurement and Evaluation Council, American Alliance for Health, Physical Education.
- 2005 “Recognition for Contributions as Section Editor, Measurement and Evaluation, Research Quarterly for Exercise and Sport 1999-2005,” Research Consortium, AAHPERD.
- 2005 Recognition “For Outstanding Leadership ACSM-UIUC Walking for Health Specialty Conference: October 13-15, 2005,” American College of Sports Medicine.
- 2006 Member of the Science Board (2006-2008), the President’s Council on Physical Fitness and Sports.
- 2007 “Faculty Fellow,” the Academy for Entrepreneurial Leadership, University of Illinois at Urbana-Champaign.
- 2009 “Honorary Professor,” The Hong Kong Institute of Education (2009-2011).
- 2011 Member of the Institute of Medicine’s Committee on ‘Fitness Measures and Health Outcomes in Youth.’”
- 2011 Lecturer for Fifth Annual Margaret Jo Safrit Lecture in Kinesiology, University of Wisconsin-Madison.
- 2013 Lecturer for Seventh Annual *Research Quarterly for Exercise and Sport* Lecture, Research Consortium, AAHPERD.

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## **I. RESEARCH: PUBLICATION**

### **A. Scholarly Books Published**

#### **a. Authored**

1. **Zhu, W.**, Safrit, M.J., & Cohen, A.S. (1999). *FitSmart test technical manual* [CD-ROM]. Champaign, IL: Human Kinetics.
2. **Zhu, W.**, Safrit, M.J., & Cohen, A.S. (1999). *FitSmart test user manual: High school edition*. Champaign, IL: Human Kinetics.

3. National Association for Sport and Physical Education (2008). *PE metrics: Assessing the national standards, Standard 1*. Reston, VA: Author. (Written as a member of the National Assessment Task Force with co-authors: Avery, M., Dyson, B., Fox, C., Fiset, J., Franck, M., Placek, J., Rink, J., & **Zhu, W.**)
4. National Association for Sport and Physical Education (2010). *PE metrics: Assessing the national standards 1-6 in elementary school*. Reston, VA: Author. (Written as a member of the National Assessment Task Force with co-authors: Avery, M., Dyson, B., Fiset, J., Fox, C., Franck, M., Graber, K.C., Placek, J., Rink, J., Williams, L., & **Zhu, W.**)
5. National Association for Sport and Physical Education (2011). *PE metrics: Assessing national standards 1-6 in secondary school*. Reston, VA: Author. (Written as a member of the National Assessment Task Force with co-authors: Avery, M., Dyson, B., Fiset, J., Fox, C., Franck, M., Graber, K.C., Placek, J., Rink, J., Williams, L., & **Zhu, W.**)
6. IOM (Institute of Medicine) (2012). *Fitness measures and health outcomes in youth*. Washington, DC: The National Academies Press. (Note: I am one of the committee member contributed to the report: Russell R. Pate, Cameron Bilmkie, Darla Castelli, Charles B. Corbin, Stephen R. Daniels, Harold W. Kohl III, Robert M. Malina, Jennifer Sacheck, David Stodden, Melicia Whitt-Glover, & **Weimo Zhu**).
7. Qiu, P., & **Zhu, W.** (2012). *Tai Chi illustrated: For greater balance, relaxation, and health*. Champaign, IL: Human Kinetics.

In progress

8. **Zhu, W.** (Ed., in progress). *Physical education assessment: Principles and practices*. Champaign, IL: Human Kinetics.
9. **Zhu, W.** (in progress). *Persuasive Technology in Physical Activity Promotion*. Champaign, IL: Human Kinetics.
10. **Zhu, W.**, & Safrit, M.J. (in progress). *Introduction to Measurement and Evaluation in Kinesiology*. St. Louis: McGraw-Hill.

**b. Book Chapters**

1. **Zhu, W.** (2002). Equating and linking of physical activity questionnaires. In G. Welk and D. Dale (Eds.), *Physical activity assessments for health-related research*. pp. 81-92. Champaign, IL: Human Kinetics.
2. **Zhu, W.**, & Zhang, S. (2004). Principles and applications of bootstrapping statistical analysis. In N. Stergiou (Ed.), *Innovative analyses of human movement*. pp. 207-221. Champaign, IL: Human Kinetics.
3. **Zhu, W.**, & Kennedy, J. (2005). Dimensionality and scaling issues measuring activities of daily

- living (ADL). In N. Bezruczko (Ed.), *Rasch measurement in health sciences*. pp. 204-224. Maple Grove, MN: JAM Press.
4. **Zhu, W.** (2006). Constructing tests using item response theory. In T. Wood and W. Zhu (Eds.), *Measurement Theory and Practice in Kinesiology*. pp. 53-76. Champaign, IL: Human Kinetics.
  5. **Zhu, W.** (2006). Qi, aging and measurement: History, mystery and controversy. In W. Zhu and W. Chodzko-Zajko (Eds.). *Measurement issues in aging and physical activity: Proceedings of the 10<sup>th</sup> Measurement and Evaluation Symposium*. pp. 101-112. Champaign, IL: Human Kinetics.
  6. **Zhu, W.** (2006). Scales, norms, and score comparability. In T. Wood and W. Zhu (Eds.), *Measurement Theory and Practice in Kinesiology*. pp. 93-111. Champaign, IL: Human Kinetics.
  7. **Zhu, W., & Maxwell, S.** (2006). Analyzing data from large and small data sets. In T. Wood and W. Zhu (Eds.), *Measurement Theory and Practice in Kinesiology*. pp. 199-216. Champaign, IL: Human Kinetics.
  8. **Zhu, W.** (2007). Promoting physical activity through internet: A persuasive technology view. In de Kort, Y., Ijsselstein, W., Midden, C., Eggen, B., & Fogg, B.J. (Eds.). *Persuasive technology* (pp. 12-17). New York: Springer.
  9. Morrow, J.R., Jr., & **Zhu, W.** (2008). Physical fitness standards for children. In G.J. Welk & M. D. Meredith (Eds.), *Fitnessgram/Activitygram Reference Guide* (pp. 7-1 to 7-14). Dallas, TX: The Cooper Institute.
  10. Welk, G., **Zhu, W.**, & Wei, J. (2008). Physical activity, child fitness, and the obesity epidemic. In G. Payne, P. Geng, P. Geng, & G. Liang (Eds.). *Introduction to human motor development* (pp. 421-445). People's Education Press of China, Beijing, China.
  11. **Zhu, W.** (2012). Measurement practice in sport and exercise psychology: A historical, comparative and psychometric view. In G. Tenenbaum, R. Eklund, & A. Kamata (Eds.). *Measurement in sport and exercise psychology*. pp. 9-21. Champaign, IL: Human Kinetics.

#### In progress

12. **Zhu, W.**, & Lee, M. (in progress). Optimal categorization construction: A Rasch view. In W. P. Fisher (Ed.), *Access to the Foundations of Measurement: Professional Identity in the Career of Benjamin D. Wright* Maple. Grove, MN: JAM Press.
13. Kang, M., & **Zhu, W.** (in progress). Setting performance standards. In W. Zhu (Ed.). *Physical education assessment: Principles and practices*. Champaign, IL: Human Kinetics.
14. Ragan, B., & **Zhu, W.** (in progress). Computerized and on-line testing for alternative assessment. In W. Zhu (Ed.). *Physical education assessment: Principles and practices*. Champaign, IL: Human Kinetics.
15. **Zhu, W.** (in progress). Constructing and managing assessment systems. In W. Zhu (Ed.). *Physical education assessment: Principles and practices*. Champaign, IL: Human Kinetics.
16. **Zhu, W.**, Gao, Y., & Kim, M. (in progress). Grading and reporting alternative assessment. In W.

Zhu (Ed.). *Physical education assessment: Principles and practices*. Champaign, IL: Human Kinetics.

17. **Zhu, W.,** & Kulinna, P.H. (in progress). Assessing affective domain. In W. Zhu (Ed.). *Physical education assessment: Principles and practices*. Champaign, IL: Human Kinetics.
18. **Zhu, W.,** & Lee, M. (in progress). Test accommodation for students with disabilities. In W. Zhu (Ed.). *Physical education assessment: Principles and practices*. Champaign, IL: Human Kinetics.
19. **Zhu, W.,** & Welk, G. (in progress). Assessing physical fitness and activity. In W. Zhu (Ed.). *Physical education assessment: Principles and practices*. Champaign, IL: Human Kinetics.

## **B. Editorships of Books/Proceedings**

1. **Zhu, W.** (1997, Ed.). JOPERD Feature: Alternative assessment: What, why, how. *Journal of Physical Education, Recreation & Dance*, 68(7), 17-40.
2. Wood, T.M., & **Zhu, W.** (Eds., 2006). *Measurement Theory and Practice in Kinesiology*. Champaign, IL: Human Kinetics.
3. **Zhu, W.,** & Chodzko-Zajko, W. (Eds., 2006). Measurement issues in aging and physical activity: Proceedings of the 10<sup>th</sup> Measurement and Evaluation Symposium. Champaign, IL: Human Kinetics.
4. **Zhu, W.** (Ed., 2008). Walking for health -- Proceedings of the conference "Walking for Health: Measurement and Research Issues and Challenges." *Medicine & Science in Sports & Exercise, Supplement to Volume 40, Number 7*.

### In progress

5. **Zhu, W.** (Ed., in progress). *Physical education assessment: Principles and practices*. Champaign, IL: Human Kinetics.
6. **Zhu, W.,** & Owen, N. (in progress). *Sedentary behavior and health: Concepts, assessment & intervention*. Champaign, IL: Human Kinetics.

## **C. Journal Articles Published**

### a. Refereed Journals

1. Safrit, M.J., **Zhu, W.,** & Stiegelmeier, J. (1990). The context of measurement instruction in physical education. *Research Quarterly for Exercise and Sport*, 61(3), 291-296.
2. Ennis, C.D., Mueller, L.K., & **Zhu, W.** (1991). Description of knowledge structures within concept-based curriculum framework. *Research Quarterly for Exercise and Sport*, 62(3), 309-318.
3. Ennis, C.D., & **Zhu, W.** (1991). Value orientations: A description of teachers' goals for student learning. *Research Quarterly for Exercise and Sport*, 62(1), 33-40.
4. Kollath, J., Safrit, M.J., **Zhu, W.,** & Gao, L. (1991). The measurement errors in modified pull-ups

- testing. *Research Quarterly for Exercise and Sport*, 62(4), 432-435.
5. Safrit, M.J., **Zhu, W.**, Costa, M.G., & Zhang, L. (1992). The difficulty of sit-up tests: An empirical investigation. *Research Quarterly for Exercise and Sport*, 63(3), 277-283.
  6. Smoczyk, C.M., **Zhu, W.**, & Whatley, M.H. (1992). An instrument for measuring cancer patients' preferences for support groups. *Journal of Cancer Education*, 7(3), 267-279.
  7. **Zhu, W.**, & Safrit, M.J. (1993). The calibration of a sit-ups task using the Rasch Poisson Counts model. *The Canadian Journal of Applied Physiology*, 18(2), 207-219.
  8. **Zhu, W.**, & Kurz, K.A. (1994). Rasch Partial Credit analysis of gross motor competence. *Perceptual and Motor Skill*, 79, 947-961.
  9. **Zhu, W.**, & Wirth, J.C. (1995). A cluster analysis of levels of body fatness in children. *Perceptual and Motor Skill*, 80, 803-818.
  10. **Zhu, W.** (1996). Should total scores from a rating scale be directly used? *Research Quarterly for Exercise and Sport*, 67(3), 363-372.
  11. **Zhu, W.**, & Cole, E.L. (1996). Many-faceted Rasch calibration of a gross-motor instrument. *Research Quarterly for Exercise and Sport*, 67(1), 24-34.
  12. **Zhu, W.** (1997). A multi-level analysis of school factors associated with health-related fitness. *Research Quarterly for Exercise and Sport*, 68, 124-135.
  13. **Zhu, W.** (1997). Making bootstrap statistical inferences: A tutorial. *Research Quarterly for Exercise and Sport*, 68(1), 44-55.
  14. **Zhu, W.**, & Erbaugh, S.J. (1997). Assessing changes in swimming skills using the hierarchical linear model. *Measurement in Physical Education and Exercise Science*, 1(3), 179-201.
  15. **Zhu, W.**, Updyke, W., & Lewandowski, C. (1997). Post-hoc Rasch analysis of optimal categorization of an ordered-response scale. *Journal of Outcome Measurement*, 1(4), 286-304.
  16. Cardinal, B.J., Engels, H.-J., **Zhu, W.** (1998). Application of the transtheoretical model of behavior change to preadolescents' physical activity and exercise behavior. *Pediatric Exercise Science*, 10, 69-80.
  17. Engels, H.-J., Drouin, J., **Zhu, W.**, & Kazmierski, J.F. (1998). Effects of low-impact, moderate intensity exercise training with and without wrist weights on functional capacities and mood states in older adults. *Gerontology*, 44, 239-244.
  18. Engels, H.-J., **Zhu, W.**, & Moffatt, R.J. (1998). An empirical evaluation of the prediction of maximal heart rate. *Research Quarterly for Exercise and Sport*, 69, 94-98.
  19. **Zhu, W.** (1998). Comments on "Development of a Cadence Curl-Up Test for College Students" (Sparling, Millard-Stafford, & Snow, 1997): Concerns about validity and practicality. *Research Quarterly for Exercise and Sport*, 69(3), 308-310.

20. **Zhu, W.** (1998). Test equating: What, why, how? *Research Quarterly for Exercise and Sport*, 69, 11-23.
21. **Zhu, W.**, Ennis, C.D., & Chen, A. (1998). Many-faceted Rasch modeling experts' judgement in test development. *Measurement in Physical Education and Exercise Science*, 2, 21-39.
22. **Zhu, W.**, & Kang, S.-J. (1998). Cross-cultural stability of the optimal categorization of a self-efficacy scale: A Rasch analysis. *Measurement in Physical Education and Exercise Science*, 2(4), 225-241.
23. Kulinna, P.H., **Zhu, W.**, Behnke, M., Johnson, R.O., McMullen, D., Turner, M.E., & Wolff, G. (1999). Six steps to developing and using fitness portfolios. *Teaching Elementary Physical Education*, 28, 15-17.
24. **Zhu, W.** (2000). Score equivalence is at the heart of international physical activity measures of physical activity. *Research Quarterly for Exercise and Sport*, 71(Suppl. 2), 121-128.
25. **Zhu, W.** (2000). Which should it be called: Convergent validity or discriminant validity? *Research Quarterly for Exercise and Sport*, 71(2), 190-194.
26. Chen, A., & **Zhu, W.** (2001). Re-visiting the assumptions for inferential statistical analyses: A tutorial for data analysis in physical education research. *Quest*, 53, 418-439.
27. Kulinna, P.H., & **Zhu, W.** (2001). Development and calibration of fitness portfolio tasks for first-sixth grade students. *Research Quarterly for Exercise and Sport*, 72, 324-334.
28. **Zhu, W.** (2001). An empirical investigation of Rasch equating of motor function tasks. *Adapted Physical Activity Quarterly*, 18(1), 72-89.
29. **Zhu, W.** (2001). ITRS: A program to compute inter-rater reliability. *Measurement in Physical Education and Exercise Science*, 5(1), 57-62.
30. **Zhu, W.** (2001). Standards for Educational and Psychological Testing (a book review). *Measurement in Physical Education and Exercise Science*, 5, 251-254.
31. **Zhu, W.**, Timm, G., & Ainsworth, B.A. (2001). Rasch calibration and optimal categorization of an instrument measuring women's exercise perseverance and barriers. *Research Quarterly for Exercise and Sport*, 72(2), 104-116.
32. Kulinna, P.H., **Zhu, W.**, Kuntzleman, C., & DeJong, G. (2002). Evaluation of a statewide curriculum implementation using a content-coverage index. *Measurement in Physical Education and Exercise Science*, 6(2), 127-142.
33. Kulinna, P.H., **Zhu, W.**, Martin, J.J., & Reed, B. (2002). Development and calibration of an instrument measuring barriers to physically active physical education classes. *Journal of Human Movement Studies*, 43, 1-16.
34. **Zhu, W.** (2002). A confirmatory study of Rasch-based optimal categorization of a rating scale. *Journal of Applied measurement*, 3(1), 1-15.



35. Washburn, R.A., **Zhu, W.**, McAuley, E., Frogley, M., & Figoni, S.F. (2002). The physical activity scale for individuals with physical disabilities: Development and Evaluation. *Arch Phys Med Rehabil*, 83(2), 193-200.
36. Timm, G., Kulinna, P.H., **Zhu, W.**, Coleman, D., Hawkins, M., Angelo, K.S., Bruinsma, T., Cantrell, C., Green, V., Moore, B., & Wilson, S. (2003). Creating instruments to assess the social development of students. *Teaching Elementary Physical Education*, 14(6), 36-40.
37. Chen, A., & **Zhu, W.** (2005). Young children's intuitive interest in physical activity: Personal, school, and home factors. *Journal of Physical Activity and Health*, 2, 1-15.
38. Tripp, A., & **Zhu, W.** (2005). Assessment of students with disabilities in physical education: Legal perspectives and practice. *JOPERD*, 2, 41-47.
39. Kang, M., **Zhu, W.**, Tudor-Locke, C., & Ainsworth, B. (2005). Experimental determination of effectiveness of an individual information-centered approach in recovering step-count missing data. *Measurement in Physical Education and Exercise Science*, 9(4), 233-250.
40. Kulinna, P.H., **Zhu, W.**, Kuntzleman, C., & DeJong, G. (2006). Evaluating multilevel school data: An example using HLM to study a physical activity curriculum. *International Journal of Physical Education*, XLIII(3), 109-121.
41. Heffernan, K.S., Jae, S.Y., Lee, M., Mojtahedi, M., Evans, E.M., **Zhu, W.**, & Fernhall, B. (2007). Gender differences in QTc interval in young, trained individuals with lower spinal cord injury. *Spinal Cord*, 2007, 1-4.
42. **Zhu, W.** (2007). Assessing kinesiology students' learning in higher education. *Quest*, 59, 124-142.
43. Kang, M., **Zhu, W.**, Ragan, B. G., & Frogley, M. (2007). Perceived exercise barriers and perseverance of children and youth with physical disabilities. *Rehabilitation Psychology*, 52(2), 170-176.
44. Motl, R.W., **Zhu, W.**, Park, Y., Scott, J.A., Snook, E.M. (2007). Reliability of scores from physical activity monitors in adults with multiple sclerosis. *Adapted Physical Activity Quarterly*, 24(3), 245-253.
45. Chodzko-Zajko, **W.**, **Zhu, W.**, Bazzarre, T., Castelli, D., Graber, K., & Woods, A. (2008). "We Move Kids" – The consensus report from the roundtable to examine strategies for promoting walking in the school environment. *Medicine & Science in Sports & Exercise*, 40(Suppl. 7), S603-S605.
46. King, A.C., Satarino, W., Marti, J., & **Zhu, W.** (2008). Multi-level modeling of walking behavior: Advances in understanding the interactions of people, place, and time. *Medicine & Science in Sports & Exercise*, 40(Suppl. 7), S584-S593.
47. **Zhu, W.** (2008). Let's keep walking. *Medicine & Science in Sports & Exercise*, 40(Suppl. 7), S509-S511.
48. **Zhu, W.** (2008). Promoting physical activity using technology. *Research Digest*, 9(3), 1-6.

49. Fisette, J.L., Placek, J.H., Avery, M., Dyson, B., Fox, C., Franck, M., Graber, K., Rink, J., & **Zhu, W.** (2009). Developing quality physical education through student assessments. *Strategies*, 22(3), 33-34.
50. Fisette, J.L., Placek, J.H., Avery, M., Dyson, B., Fox, C., Franck, M., Graber, K., Rink, J., & **Zhu, W.** (2009). Instructional consideration for implementing student assessments. *Strategies*, 22(4), 33-34.
51. Morrow, J.R., Jr., **Zhu, W.**, Franks, B.D., Meredith, M.D., & Spain, C. (2009). 1958-2008: 50 Years of youth fitness tests in the United States. *Research Quarterly for Exercise and Sport*, 80(1), 1-11.
52. Broglio, S.P., **Zhu, W.**, & Park, Y. (2009). Reliability of the balance error scoring system in healthy young adults using generalizability theory analysis. *Journal of Athletic Training*, 44(5), 497-502.
53. Datta, A.K., Jackson, V., Nandkumar, R., Sproat, J., **Zhu, W.**, & Krahling, H. (2010). CHOIS: Enabling grid technologies for obesity surveillance and control. *Studies in Health Technology and Informatics*, 159, 191-202.
54. Lee, M., **Zhu, W.**, Hedrick, B., & Fernhall, B. (2010). Determining MET values of physical activities for persons with paraplegia. *Disability and Rehabilitation*, 32(4), 336-343.
55. Lee, M., **Zhu, W.**, Hedrick, B., & Fernhall, B. (2010). Estimating MET values using the ratio of heart rate for persons with paraplegia. *Medicine & Science in Sports & Exercise*, 42(5), 985-990.
56. Morrow, J.R., Jr., Martin, S.B., Welk, G., **Zhu, W.**, & Meredith, M. (2010). Overview of the Texas Youth Fitness Project. *Research Quarterly for Exercise and Sport*, 81(Suppl. 3), S1-S5.
57. Zhu, W. (2010). Birth, growth, and challenges of “Kinesmetrics” in the USA. *Annales Kinesiologiae*, 1(2), 95-111.
58. **Zhu, W.** (2010). “Food is medicine; the best kind” (A book review for “Chinese Nutrition Therapy: Dietetics in Traditional Chinese medicine” by Joerg Kastener). *American Journal of Lifestyle Medicine*, 4(July/August), 365.
59. **Zhu, W.**, Boiarskaia, E., Welk, G., & Meredith, M. (2010). Physical education and school contextual factors relating to students’ achievement and cross-grade differences in aerobic fitness and obesity. *Research Quarterly for Exercise and Sport*, 81(Suppl. 3), S53-S64.
60. **Zhu, W.** & Lee, M. (2010). Invariance of wearing location of Omron-BI pedometers: A validation study. *Journal of Physical Activity and Health*, 7, 706-717.
61. **Zhu, W.**, Plowman, S.A., & Park, Y. (2010). A primary test centered equating method for cut-off score setting. *Research Quarterly for Exercise and Sport*, 81(4), 400-409.
62. **Zhu, W.**, Guan, S., & Yang, Y. (2010). Clinical implication of Tai Chi interventions: A review. *American Journal of Lifestyle Medicine*, 4(Sept./Oct.), 418-432.
63. **Zhu, W.**, Welk, G., Meredith, M., & Boiarskaia, E. (2010). A survey of physical education programs and policies in Texas schools. *Research Quarterly for Exercise and Sport*, 81(Suppl. 3), S42-S52.

64. Boiarskaia, E., Boscolo, M.S., **Zhu, W.** & Mahar, M.T. (2011). A cross-validation study of an equating method linking aerobic field fitness tests. *American Journal of Preventive Medicine*, 41(4S2), S124-S130.
65. Dyson, B., Placek, J. H., Graber, K. C., Fiset, J. L., Rink, J., **Zhu, W.**, Avery, M., Franck, M., Fox, C., Raynes, D., & Park, Y. (2011). Development of PE metrics elementary assessments for national physical education standard 1. *Measurement in Physical Education and Exercise Science*, 15, 100-118.
66. Fox, C., **Zhu, W.**, Park, Y., Fiset, J. L., Graber, K. C., Dyson, B., Avery, M., Franck, M., Placek, J. H., Rink, J., and Raynes, D. (2011). Related critical psychometric issues and their resolutions during development of PE metrics. *Measurement in Physical Education and Exercise Science*, 15, 138-154
67. Gao, Y., & **Zhu, W.** (2011). Identifying group sensitive physical activities: A DIF analysis of NHANES Data. *Medicine & Science in Sports & Exercise*, 43(5), 922-929.
68. Pereira, S., Seabra, A.T., Silva, R.G., **Zhu, W.**, Beunen, G.P., & Maia, J.A. (2011). Correlates of health-related physical fitness levels of Portuguese children. *International Journal of Pediatric Obesity*, 6, 53-59.
69. **Zhu, W.**, Rink, J., Placek, J. H., Graber, K. C., Fox, C., Fiset, J. L., Dyson, B., Park, Y., Avery, M., Franck, M., & Raynes, D. (2011). Physical education metrics: Background, testing theory, and methods. *Measurement in Physical Education and Exercise Science*, 15, 87-99.
70. **Zhu, W.**, Fox, C., Park, Y., Fiset, J. L., Dyson, B., Graber, K. C., Avery, M., Franck, M., Placek, J. H., Rink, J., & Raynes, D. (2011). Development and calibration of an item bank for PE metrics assessments: Standard 1. *Measurement in Physical Education and Exercise Science*, 15, 119-137.
71. Gao, Y., & **Zhu, W.** (2011). Differential item functioning analysis of 2003-2004 NHANES physical activity questionnaire. *Research Quarterly for Exercise and Sport*, 82, 381-390.
72. Graber, K.C., Erwin, H.E., Woods, A.M., Rhoades, J., & **Zhu, W.** (2011). A national profile of teacher education faculty: The construction of an online survey. *Measurement in Physical Education and Exercise Science*, 15, 245-256.
73. Wang, J. & **Zhu, W.** (2011). Effect of resistance training on resting blood pressure: A meta-analysis of randomized controlled trails. *China Sport Science and Technology*, 47(4), 106-2011.
74. **Zhu, W.**, Mahar, M. T. Mahar, Welk, G. J., Going, S.B., & Cureton, K. J. (2011). Approaches for development of criterion-referenced standards in health-related youth fitness tests. *American Journal of Preventive Medicine*, 41(4S2), S68-S76.
75. Ainsworth, B.E., Caspersen, C., Matthews, C., Masse, L., Baranowski, T., & **Zhu, W.** (2012). Recommendations to improve the accuracy of estimates of physical activity derived from self report.. *Journal of Physical Activity and Health*, 9(Suppl 1), S76-S84.
76. Chen, K.Y., Janz, K.F., **Zhu, W.**, & Brychta, R.J. (2012). Re-defining the roles of sensors in

- objective physical activity monitoring. *Medicine & Science in Sports & Exercise*, 44(Suppl 1), S13-S23.
77. Staudenmayer, J., **Zhu, W.**, & Catellier, D., (2012). Statistical considerations in the analysis of accelerometry-based activity monitor data. *Medicine & Science in Sports & Exercise*. 44(Suppl 1), S61-S67.
78. **Zhu, W.** (2012). Sadly, the earth is still round ( $p < 0.05$ ). *Journal of Sport and Health Science*, doi:10.1016/j.jshs.2012.02.002.
79. **Zhu, W.** (2013). “17% at or above the 95<sup>th</sup> percentile” – What is wrong with this statement? *Journal of Sport and Health Science*, 1(2), 67-69.
80. **Zhu, W.** (2013). Reliability: What type, please! *Journal of Sport and Health Science*, 2(1), 62-64.
81. **Zhu, W.**, Nodvic-Budic, Z., Olshansky, R., Marti, J., Gao, Y., Park, Y., McAuley, E., & Chodzko-Zajko, W. (2013). Agent-based Modeling of Physical Activity Behavior and Environmental Correlations: An Introduction and Illustration. *Journal of Physical Activity and Health*, 10(3), 309-322.

#### In press

82. Yu, H., Chen, X., **Zhu, W.**, & Cao, C. (in press). A quasi-experiment study of training load of Chinese top-level speed skaters: Threshold vs. polarized model. *International Journal of Sports Physiology and Performance*.
83. **Zhu, W.**, Nodvic-Budic, Z., Olshansky, R., Marti, J., Gao, Y., Park, Y., McAuley, E., & Chodzko-Zajko, W. (in press). *Journal of Physical Activity and Health*.

#### In review

84. Wang, J., & **Zhu, W.** (in review). Impact of resistance training on high-blood pressure: A meta-analysis. *Chinese Sports Medicine*.

#### **b. Other Journals**

1. **Zhu, W.** (1985). The physiological change during long-distance running. *Chinese Physical Education and Exercise Science*, 3, 24-28.
2. **Zhu, W.** (1986). Athletic training, muscle strength and muscle fiber: A review. *Chinese Sports Medicine*, 1, 34-42.
3. **Zhu, W.** (1986). Effect of weight-lifting on muscle strength and muscle fiber. *Chinese Applied Physiology*, 2, 1-8.

4. Engels, H.-J., & **Zhu, W.** (1995, Winter). The new AAHPERD national fitness education and assessment program. *Michigan Association for Health, Physical Education & Dance Journal*, pp. 15-17.
5. **Zhu, W.** (1995). Communicating measurement. *Rasch Measurement Transactions*, 9(2), pp. 437-438.
6. **Zhu, W.** (1996). Gross motor mapping. *Rasch Measurement Transactions*, 10(2), 505.
7. **Zhu, W.**, Chen, J.-Z., Wang, R.-W., Chen, M.-G., & Kang, S.-J. (1996). Fitness testing in Asia. *The Active Voice*, 3(1), 2.
8. **Zhu, W.** (1997). Alternative assessment: What, why, how. *Journal of Physical Education, Recreation & Dance*, 68(7), 17-18.
9. Engels, H.-J., & **Zhu, W.** (1998). Tips on using and understanding multiple regression analyses. *RQES in the Classroom*, March, 4-7.

**D. Papers/Abstracts Published in Conference Proceedings**

1. Safrit, M.J., **Zhu, W.**, Gao, L., & Kalohn, J. (1990). Item response theory and adaptive testing. In M.J. Safrit (Ed.), *Measurement Theory and Practice in Exercise Science and Sport*, (pp. 171-173). Bloomington, IN: OT Publishing.
2. **Zhu, W.** (1990). The effect of varying cutoff scores on the underlying domain of items. In M.J. Safrit (Ed.), *Measurement Theory and Practice in Exercise Science and Sport*, (pp. 168-170). Bloomington, IN: OT Publishing.
3. **Zhu, W.**, & Safrit, M.J. (1990). Age and gender factors in setting health fitness standards for Physical Best: Age 10 - 18. In J. E. Clark (Ed.), *Abstracts of Research Papers 1990*. (p. 302, Abstract). Reston, Virginia: AAHPERD.
4. **Zhu, W.**, & Safrit, M.J. (1991). The calibration of a sit-up task using the Rasch Poisson Count model. In W. Liemohn (Ed.), *Abstracts of Research Papers 1991*. (p. 54, Abstract). Reston, Virginia: AAHPERD.
5. **Zhu, W.** (1992). Development of a computerized adaptive visual testing model. In G. Tenenbaum, T. Baz-Liebermann, & Z. Artai (Eds.), *Proceedings of the International Conference on Computer Application in Sport and Physical Education*, (pp. 260-267). Natanya, Israel: Wingate Institute for Physical Education and Sport and The Zinman College of Physical Education.
6. **Zhu, W.**, & Kurz-McPherson, K.A. (1993). Rasch Partial Credit analysis of gross motor development. In T. Baumgartner & K. Wagoner (Eds), *Psychomotor Measurement and Evaluation Past, Present, and Future: A Symposium in Honor of M. Jo Safrit's Retirement*, (pp. 103-104). Athens, GA: The University of Georgia.
7. Safrit, M.J., **Zhu, W.**, & Cohen, A.S. (1994). The evaluation of physical fitness knowledge. Abstract published at *the Volume of Abstracts of the World Congress Physical Education and Sport '94 Changes and Challenges*, AIESEP, Berlin, Germany (p. 58, Abstract).

8. **Zhu, W.** (1994). Computer-intensive statistics and assessment of motor behavior. Abstract published at *the Volume of Abstracts of the World Congress Physical Education and Sport '94 Changes and Challenges*, AIESEP, Berlin, Germany (p. 298).
9. **Zhu, W.** (1994). Problems and solution of analyzing hierarchical data: A fitness illustration. In J.E. Bryant & L.F. Kieffer (Eds.), *Change and the Human Dimension of Physical Activity* (Proceedings of the International University Sports Federation Conference, Buffalo '93, pp. 83-97). Buffalo, NY: The State University of New York-Buffalo.
10. **Zhu, W., & Cole, L.E.** (1994). Many-faceted Rasch calibration of a gross-motor instrument. Abstract published at *the Volume of Abstracts of the World Congress Physical Education and Sport '94 Changes and Challenges*, AIESEP, Berlin, Germany (p. 299).
11. **Zhu, W.** (1995). Rasch modeling of motor performance. In '95 KNUPE International Symposium (*Proceedings of the 1995 Korean National University of Physical Education*, October 9-10, 1995, pp. 11-42). Seoul, Korea: The Research Institute of Physical Education & Sports Science, Korean National University of Physical Education.
12. **Zhu, W.** (1996). Computer-intensive statistics and the assessment of motor behavior. In W.-D. Brettschneider & G. Doll-Tepper (Eds.), *Physical Education and Sport: Changes and Challenges* (the Proceedings of the Berlin '94 AIESEP World Congress, Sport, Leisure and Physical Education: Vol. 2, pp. 334-344).
13. Feng, S., **Zhu, W.**, & Engels, H.J. (1997). Rasch equating of two parallel forms of a children's exercise knowledge test. In T.M. Wood (Ed.), *Exploring the Kaleidoscope: Proceedings of the 8th Measurement and Evaluation Symposium* (p. 159, Abstract). Corvallis, OR: Oregon State University.
14. Kang, S.J., & **Zhu, W.** (1997). Rasch equating of English and Korean versions of a psychomotor self-efficacy scale for children. In T.M. Wood (Ed.), *Exploring the Kaleidoscope: Proceedings of the 8th Measurement and Evaluation Symposium* (p. 161, Abstract). Corvallis, OR: Oregon State University.
15. Kang, S.J., & **Zhu, W.** (1997). How many categories are appropriate to measure sport competition anxiety? In *Better Quality of Sport and Physical Education for All: The '97 Seoul International Sport Science Congress Proceedings* (pp. 755-763). Seoul, Korea: Korean Alliance for Health, Physical Education, Recreation and Dance.
16. **Zhu, W.** (1997). A leaf tells the story: A commentary on James and Bates' paper. In T.M. Wood (Ed.), *Exploring the Kaleidoscope: Proceedings of the 8th Measurement and Evaluation Symposium* (pp. 82-89). Corvallis, OR: Oregon State University.
17. **Zhu, W.** (1997). Psychometric problems and possible solution in assessing physical activity using questionnaires. In *Better Quality of Sport and Physical Education for All: The '97 Seoul International Sport Science Congress Proceedings* (pp. 732-754). Seoul, Korea: Korean Alliance for Health, Physical Education, Recreation and Dance.
18. **Zhu, W.** (1997). Utility of Rasch equating: An empirical investigation. In T.M. Wood (Ed.), *Exploring the Kaleidoscope: Proceedings of the 8<sup>th</sup> Measurement and Evaluation Symposium* (p. 160, Abstract). Corvallis, OR: Oregon State University.

19. **Zhu, W., & Kang, S.J.** (1997). Rasch equating of new items to a calibrated item pool. In T.M. Wood (Ed.), *Exploring the Kaleidoscope: Proceedings of the 8th Measurement and Evaluation Symposium* (p. 163, Abstract). Corvallis, OR: Oregon State University.
20. **Zhu, W., Safrit, M.J., & Cohen, A.A.** (1997). Development of a high school physical fitness knowledge test: IRT calibration and equating. In T.M. Wood (Ed.), *Exploring the Kaleidoscope: Proceedings of the 8th Measurement and Evaluation Symposium* (p. 162, Abstract). Corvallis, OR: Oregon State University.
21. **Zhu, W., & Kennedy, J.J.** (2000). *Psychometric issues and challenges in measuring ADL/IADL activities of daily living*. In KAHPERD (Ed.), *New paradigms of Sport & Physical Education in the 21st Century: Proceedings of the 2000 Seoul International Sport Science Congress*. (pp. 1080-1099). Seoul, Korea: KAHPERD.
22. **Zhu, W.** (2003). Assessing physical activity space: Issues and challenges. *Proceedings II of 2003 Daegu Universiade Conference: Facing the Challenge*, pp. 601-608. 2003 Daegu Universiade Conference Organizing Committee.
23. **Zhu, W.** (2007). New theory and method for obesity epidemic modeling. *Proceedings of the 2007 Conference on China National Physical Fitness* (pp. 254-266). Macau Sport Development Board, Macau SAR.
24. **Zhu, W.** (2007). Thoughts on scientific research on Guo Lin Qi-gong. *Proceedings of the 2007 Shanghai Guo Lin Qi-gong Symposium* (pp. 3-7; in Chinese). Shanghai Club of Cancer Recovery, Shanghai, China.
25. **Zhu, W.** (Nov., 2007). Modern exercise vs. Guo Lin Qi-gong in cancer care and survivorship: Lessons learned and future directions. *Processing of the Shanghai 10<sup>th</sup> International Symposium on Qigong* (pp. 22-29). Qigong Institute, Shanghai University of Traditional Chinese Medicine, Shanghai, China.
26. **Zhu, W.** (2007). Promoting physical activity through internet: A persuasive technology view. In de Kort, Y., Ijsselstein, W., Midden, C., Eggen, B., & Fogg, B.J. (Eds.). *Persuasive technology* (pp. 12-17). New York: Springer.
27. **Zhu, W.** (July, 2008). Common reliability errors in Kinesiology research. In *the 2008 International Sports Biomechanics Symposium Proceedings* (pp. 34-37). International Society of Biomechanics in Sports (ISBS), Chinese Association of Biomechanics in Sports (CABS), & Guangzhou Sport University (GSU), Guangzhou, China.
28. **Zhu, W.** (August, 2009). Walking and health: Past, present and future. In *Proceedings of Scientific Congress on Sport for All* (pp. 1-6). General Administration of Sport of China & China Sport Science Society. Beijing, China.
29. **Zhu, W.** (Sept., 2009). Environment, walking and health: An evolutionary, social-ecological view. In *Proceedings of International Symposium on Walking and Health: Theory and practice* (pp. 43-61). Shanghai Administration of Sports, Shanghai, China.
30. **Zhu, W.** (Nov., 2009). Objective measurement of physical activities: A state-of-the-art review. In

- Proceedings of 3<sup>rd</sup> Shanghai International Forum on Exercise and Health* (p. 25). Shanghai University of Sport, Shanghai, China.
31. **Zhu, W.** (Dec., 2009). Dose-response issues and challenges in physical activity and health research. In *Proceedings of 2009 Shanghai International Forum on Sports Medicine and Sports Science* (p. 21-23). Shanghai, China.
  32. Wang, R., **Zhu, W.**, Wang, J., Fan, L., Li, Q., Yuan, Z., & Lu, H. (April, 2010). Effect of long-term Guo Lin qigong practice on quality of life and health. In *Proceeding of the Congress of Chinese Treatment and Rehabilitation* (p. 564). Beijing, China.
  33. **Zhu, W.** (April, 2010). A scientific look at the role of Guo Lin Qi-gong in cancer survivorship and care. In *Proceeding of the Congress of Chinese Treatment and Rehabilitation* (pp. 550-553). Beijing, China.
  34. Rimmer, J.H., **Zhu, W.** & Boiarskaia, E. (Oct., 2010). Online environmental assessment tool and use of computer adaptive testing (CAT) for achieving optimization of fitness and recreation facility accessibility. In *Proceeding of Second State of the Science Conference: Interactive Exercise Technologies and Exercise physiology for People with Disabilities* (pp. 93-104). RECTECH, University of Illinois at Chicago, Chicago, IL.
  35. **Zhu, W.** (Oct., 2011). Labor saving: Have we gone too far? In *Proceedings of International Symposium on Cycling and Health* (pp. 49-55). Shanghai Administration of Sports, Shanghai, China.
  36. **Zhu, W.** (Nov., 2011). Guo Lin Qigong for cancer care and survivorship: Some preliminary reports. In *Proceedings of the 11<sup>th</sup> International Scientific Symposium of Qi-gong* (pp. 8-11). Qigong Institute of Shanghai University of Traditional Chinese Medicine, Shanghai, China.
  37. **Zhu, W.** (Oct., 2012). Why 99% of weight control failed? In *Proceedings of International Symposium on Physical Activity & Obesity Prevention and Treatment* (pp. 28-35). Shanghai Administration of Sports, Shanghai, China.
  38. **Zhu, W.** (Sept., 2012). Tai Chi and health: Lessons learned and future direction. In *Proceedings of 3<sup>rd</sup> Shenjiang International Forum on Wushu* (pp. 1-6). Shanghai, China.
  39. **Zhu, W.** (2012, July) Lifestyle threats to China's next "Big Leap" and worksite wellness solutions. *New Fortune Magazine*, 56-59.

#### **E. Abstracts Published in Academic Journals**

1992-1993

1. Krause, J. & **Zhu, W.** (1992). An investigation of urban children's physical fitness. *Research Quarterly for Exercise and Sport*, 63(Suppl. 1), A-40.
2. Smoczyk, C.M. & **Zhu, W.** (1992). An instrument for measuring cancer patients' preferences for support groups. *Research Quarterly for Exercise and Sport*, 63(Suppl. 1), A-44.



3. **Zhu, W.** (1992). Improving testing capability by applying multimedia technology. *Research Quarterly for Exercise and Sport*, 63(Suppl. 1), A-55.
4. **Zhu, W.**, & Krause, J. (1992). Physical fitness screening of inner-city children and youth. *Medicine & Science in Sports & Exercise*, 24(Suppl. 5), S124.
5. Krause, J. & **Zhu, W.** (1993). Physical fitness characteristics of inner-city children: A three-year observation. *Medicine & Science in Sports & Exercise*, 25(Suppl. 5), S122.
6. **Zhu, W.**, & Wirth, J.C. (1993). Examining validity evidence of criterion-referenced health standards using cluster analysis. *Research Quarterly for Exercise and Sport*, 64(Suppl. 1), A-71.

1994

7. Cardinal, B.J., **Zhu, W.**, & Sachs, M.L. (1994). Effects of three formats of physical activity and exercise behavior change programs on female adults' 7-month physical activity behavior. *Medicine & Science in Sports & Exercise*, 26(Suppl. 5), S104.
8. Cole, E., & **Zhu, W.** (1994). IRT person fit statistics to diagnose motor function. *Research Quarterly for Exercise and Sport*, 65(Suppl. 1), A-61.
9. Cook, S., Field, J. & **Zhu, W.** (1994). Media, HIV/AIDS and the inner-city populations. *Research Quarterly for Exercise and Sport*, 65(Suppl. 1), A-47.
10. **Zhu, W.** (1994). Bootstrap estimation of a population's physical fitness status using small samples. *Medicine & Science in Sports & Exercise*, 26(Suppl. 5), S127.
11. **Zhu, W.**, Safrit, M.J., & Cohen, A.S. (1994). Development of a high school physical fitness knowledge test: A preliminary report. *Research Quarterly for Exercise and Sport*, 65(Suppl. 1), A-60.

1995

12. Engels, H.-J., Said, J., Wirth, J.C., & **Zhu, W.** (1995). Effect of chronic Ginseng intake on metabolic responses during graded exercise and in the recovery from exercise. *Medicine & Science in Sports & Exercise*, 27(Suppl. 5), S147.
13. **Zhu, W.** (1995). Analysis of item response patterns for diagnosing motor proficiency of special populations. *Research Quarterly for Exercise and Sport*, 66(Suppl. 1), A-88 - A-89.
14. **Zhu, W.**, & Engels, H.-J. (1995). Prediction error of maximal heart rate: Bootstrapping vs. cross-validation. *Medicine & Science in Sports & Exercise*, 27(Suppl. 5), S46.
15. **Zhu, W.**, Safrit, M.J., & Cohen, A.S. (1995). Development of a high school physical fitness knowledge test: A follow-up. *Research Quarterly for Exercise and Sport*, 66(Suppl. 1), A-50-A-51.

1996

16. Cardinal, B.J., Engels, H.-J., & **Zhu, W.** (1996). The stages of exercise in children. *Medicine & Science in Sports & Exercise*, 28(Suppl. 5), S85.

17. Erbaugh, S.J., **Zhu, W.**, & Langendorfer, S. (1996). A survey of parental attitudes/observations about children's water safety and water skillfulness. *Research Quarterly for Exercise and Sport*, 67(Suppl. 1), A-67.
18. Feng, S., **Zhu, W.**, & Engels, H.-J. (1996). Validation of a scale of beliefs about exercise in elementary school children. *Medicine & Science in Sports & Exercise*, 28(Suppl. 5), S138.
19. Shin, S., & **Zhu, W.** (1996). A comparison of Korean and American children and youth on selected fitness variables. *Medicine & Science in Sports & Exercise*, 28(Suppl. 5), S74.
20. **Zhu, W.** (1996).  $N=2,372$  or  $N=54$ ? *Medicine & Science in Sports & Exercise*, 28(Suppl. 5), S187.
21. **Zhu, W.** (1996). Predictive validity of skinfold measures: A meta-analysis. *Research Quarterly for Exercise and Sport*, 67(Suppl. 1), A-64.
22. **Zhu, W.**, Engels, H.-J., Erbaugh, S.J., Feng, S., & Dolmotte, J. (1996). Predictors of older adults' self-perceived physical fitness. *Research Quarterly for Exercise and Sport*, 67(Suppl. 1), A-103.
23. **Zhu, W.**, Erbaugh, S.J., Engels, H.-J., Feng, S., Chen, Y., & Dolmotte, J. (1996). An investigation of determinants of older adults' balance. *Research Quarterly for Exercise and Sport*, 67(Suppl. 1), A-126 - A-127.
24. **Zhu, W.**, & Kurz, K.A. (1996). Graphical DIF analysis for assessing biased motor items/tasks. *Research Quarterly for Exercise and Sport*, 67(Suppl. 1), A-63 - A-64.
25. **Zhu, W.**, Sankar, A., Gleason-Comstock, J., McCoy, R., & Gant, L. (1996). Development of an instrument measuring people living with HIV/AIDS' preferences of support group. *Research Quarterly for Exercise and Sport*, 67(Suppl. 1), A-58 - A-59.

1997

26. Drouin, J., Lueck, C., Cerullis, L., Franks, M., Engels, H.-J., & **Zhu, W.** (1997). Exercise training with and without wrist weights in older adults: Effect on muscular fitness and balance. *Medicine & Science in Sports & Exercise*, 28(Suppl. 5), S163.
27. Engels, H.-J., **Zhu, W.**, Benedix, R., Orel, M., Chen, Y., Feng, S., & Smouter, J. (1997). Evaluation of a Grassroots exercise incentive strategy to improve various facets of health-related fitness in elementary school children. *Research Quarterly for Exercise and Sport*, 68(Suppl. 1), S-163.
28. Engels, H.-J., **Zhu, W.**, Drouin, J., Timpf, D., Trumbull, A., Percer, P., & Kazmierski, J.F. (1997). Exercise training with and without weights in older adults: Effect on flexibility, body fat, and peak physiological responses. *Medicine & Science in Sports & Exercise*, 28(Suppl. 5), S163.
29. Kang, S.-J., & **Zhu, W.** (1997). Categorization stability of a rating scale: A cross-culture study. *Research Quarterly for Exercise and Sport*, 68(Suppl. 1), A-52 - A-53.
30. **Zhu, W.** (1997). A new solution for assessing and modeling effects of school physical education programs. *Research Quarterly for Exercise and Sport*, 68(Suppl. 1), A-97.

31. **Zhu, W.** (1997). CART analyses of classification of children's physical activeness. *Medicine & Science in Sports & Exercise*, 29(Suppl. 5), S130.
32. **Zhu, W.**, Updyke, W., & Lewandowski, C. (1997). Rasch analysis of optimal categorization of a rating scale. *Research Quarterly for Exercise and Sport*, 68(Suppl. 1), A-57.

1998

33. Chen, A., & **Zhu, W.** (1998). A retrospective analysis of elementary physical education teacher accountability as inferred from their decisions on using fitness tests. *Research Quarterly for Exercise and Sport*, 69(Suppl. 1), A-84 - A-85.
34. Kang, S.J., & **Zhu, W.** (1998). An empirical examination of the equivalence of three upper body strength tests. *Research Quarterly for Exercise and Sport*, 69(Suppl. 1), A-57.
35. Shin, S., & **Zhu, W.** (1998). A comparison of international children's running performance. *Research Quarterly for Exercise and Sport*, 69(Suppl. 1), A-57.
36. **Zhu, W.** (1998). Test equating of commonly used physical fitness tests. *Research Quarterly for Exercise and Sport*, 69(Suppl. 1), A-56.
37. **Zhu, W.**, Ainsworth, B., Irwin, M., Hootman, J., Levin, S., & Whitt, M. (1998). Calibration of an IRT-based bank for assessing physical activity: A preliminary report. *Research Quarterly for Exercise and Sport*, 69(Suppl. 1), A-61.
38. **Zhu, W.**, & Kang, S.J. (1998). Equivalence of three commonly used sit-up tests. *Research Quarterly for Exercise and Sport*, 69(Suppl. 1), A-56 - A-57.
39. **Zhu, W.**, & Shin, S. (1998). A cross-population examination of validity of indices of relative weight in children and youth. *Medicine & Science in Sports & Exercise*, 29(Suppl. 5), S124.

1999

40. Guan, J., & **Zhu, W.** (1999). Validity and reliability of an exercise/physical activity barrier instrument: A preliminary analysis. *Research Quarterly for Exercise and Sport*, 70(Suppl. 1), A-60 - A-61.
41. Jackson, K., & **Zhu, W.** (1999). Race and exercise/physical activity barriers. *Research Quarterly for Exercise and Sport*, 70(Suppl. 1), A-23 - A-24.
42. Kang, S.-J., & **Zhu, W.** (1999). Examination of differential item functioning of an attitude toward sports scale. *Research Quarterly for Exercise and Sport*, 70(Suppl. 1), A-61.
43. Smith, W., Timm, G., & **Zhu, W.** (1999). Comparison of women's measured and predicted lung volume and body composition by Bod Pod. *Medicine & Science in Sports & Exercise*, 30(Suppl. 5), S203.
44. Smith, W., & **Zhu, W.** (1999). Exercise/physical activity barriers and cardiovascular risk factors. *Research Quarterly for Exercise and Sport*, 70(Suppl. 1), A-23.

45. Timm, G., & **Zhu, W.** (1999). Effects of barrier perception on exercise/physical activity participation. *Research Quarterly for Exercise and Sport*, 70(Suppl. 1), A-22.
46. Whitt, M., **Zhu, W.**, Addy, C., & Ainsworth, B. (1999). An analysis of methods for reducing physical activity survey items [Abstract]. In *the Program and Abstract Book of Measurement of Physical Activity Conference* (p. 26). Dallas, TX: The Cooper Institute for Aerobics Research/AAALF.
47. **Zhu, W.** (1999). Calibrating portfolios: Making the scores meaningful. *Research Quarterly for Exercise and Sport*, 70(Suppl. 1), A-56 - A-57.
48. **Zhu, W.** (1999). Modification and calibration of an exercise/physical activity barrier instrument using the Rasch Rating Scaling model. *Research Quarterly for Exercise and Sport*, 70(Suppl. 1), A-22.
49. **Zhu, W.**, & Ainsworth, B. (1999). Validation of a classification algorithm of stage of change in an urban women population. *Medicine & Science in Sports & Exercise*, 31(Suppl. 5), S95.
- 2000
50. Chen, J.-Z., Wang, R.-W., & **Zhu, W.** (2000). Chinese women's exercise barriers: A preliminary study. *Medicine & Science in Sports & Exercise*, 32(Suppl. 5), S115.
51. Crosson, P., **Zhu, W.**, & Timm, G. (2000). African-American women's exercise barriers: A focus-group study. *Research Quarterly for Exercise and Sport*, 71(Suppl 1), A-100.
52. Kang, S.-J., & **Zhu, W.** (2000). A survey of Korean women's physical activity patterns. *Research Quarterly for Exercise and Sport*, 71(Suppl 1), A-23.
53. Kulinna, P.H., **Zhu, W.**, Kuntzleman, C., Richelew, J., DeJong, G., Timm, G., & Regualos, R. (2000). Evaluation of the effectiveness of a statewide curriculum using the hierarchical linear model. *Research Quarterly for Exercise and Sport*, 71(Suppl 1), A-63.
54. Timm, G., **Zhu, W.**, & Ainsworth, B. (2000). No time or just an excuse? *Research Quarterly for Exercise and Sport*, 71(Suppl 1), A-96.
55. Wang, R.-W., Chen, J.-Z., & **Zhu, W.** (2000). A survey of Chinese women's physical activity patterns. *Research Quarterly for Exercise and Sport*, 71(Suppl 1), A-23.
56. **Zhu, W.** (2000). Calibration of the social development instruments using the Rasch model. *Research Quarterly for Exercise and Sport*, 71(Suppl 1), A-98.
57. **Zhu, W.** (2000). Hierarchical linear model: A new approach for curriculum evaluation. *Research Quarterly for Exercise and Sport*, 71(Suppl 1), A-63.
58. **Zhu, W.** (2000). Measurement challenges in assessing international women's physical activities. *Research Quarterly for Exercise and Sport*, 71(Suppl 1), A-24.
59. **Zhu, W.**, Timm, G., Ainsworth, B., & Washburn, R. (2000). Effect of monetary incentives and follow-ups on response rate to a mail physical activity survey. *Medicine & Science in Sports &*

*Exercise*, 32(Suppl. 5), S167.

2001

60. Chen, A., & **Zhu, W.** (2001). Predicting kindergarteners' intuitive interest in physical activity: Searching for influences of personal, home, and school environment variables. *Research Quarterly for Exercise and Sport*, 72(Suppl 1), A38-A39.
61. Doyle, R., **Zhu, W.**, & Hedrick, B. (2001). A factor analysis of the construct of the barrier instrument. *Research Quarterly for Exercise and Sport*, 72(Suppl 1), A97-A98.
62. Fahlman, M.M., Engels, H.-J., & **Zhu, W.**, & Morgan, A.L. (2001). Mucosal IGA and upper respiratory tract infection during a college football season. *Medicine & Science in Sports & Exercise*, 33(Suppl 5), S79.
63. Frogley, M., **Zhu, W.**, Rimmer, J., & Creviston, T. (2001). Speaking for disabled population's lives: A focus-group approach for barrier item evaluation and generation. *Research Quarterly for Exercise and Sport*, 72(Suppl 1), A-97.
64. Kang, M., & **Zhu, W.** (2001). Validity of teacher's judgments on students' physical activity level. *Research Quarterly for Exercise and Sport*, 72(Suppl 1), A-41.
65. Marquez, D.X., McAuley, E., & **Zhu, W.** (2001). The assessment of exercise barriers: An overview. *Research Quarterly for Exercise and Sport*, 72(Suppl 1), A-97.
66. Pongurgsorn, C., Washburn, R., & **Zhu, W.** (2001). A physical activity scale for use in Thailand: Preliminary development and evaluation. *Medicine & Science in Sports & Exercise*, 33(Suppl 5), S119.
67. Washburn, R., & **Zhu, W.** (2001). A physical activity scale for individuals with physical disabilities (PASIPD): Initial evaluation. *Medicine & Science in Sports & Exercise*, 33(Suppl 5), S120.
68. Washburn, R., & **Zhu, W.** (2001). Barrier perception and physical activity participation. *Research Quarterly for Exercise and Sport*, 72(Suppl 1), A-98.
69. **Zhu, W.** (2001). Calibration of the barrier instrument using the Rasch Rating Scale model. *Research Quarterly for Exercise and Sport*, 72(Suppl 1), A-98.
70. **Zhu, W.** (2001). Calibrating portfolios to make the scores meaningful. *Research Quarterly for Exercise and Sport*, 72(Suppl 1), A-38.
71. **Zhu, W.** (2001). Data resources and psychometric issues: A review. *Research Quarterly for Exercise and Sport*, 72(Suppl 1), A-38.
72. **Zhu, W.**, Ainsworth, B., & Washburn, R. (2001). Detecting item bias in a physical activity questionnaire. *Medicine & Science in Sports & Exercise*, 33(Suppl 5), S231.

2002

73. Hsu, S.H., **Zhu, W.** (2002). Intelligent data analysis using artificial neural networks. (2002).

*Research Quarterly for Exercise and Sport*, 73(Suppl 1), A-38 - A-39.

74. Hsu, S.H., **Zhu, W.**, Frogley, M. (2002). Women wheelchair basketball players' reasons and barriers of participating in sport, exercise and physical activities. *Medicine & Science in Sports & Exercise*, 34(Suppl 5), S47.
75. Kang, M., **Zhu, W.**, Kurz, K.A., & Liu, Y. (2002). Compositional data analysis of student teachers' time usage in physical education classes. *Research Quarterly for Exercise and Sport*, 73(Suppl 1), A-36 - A37.
76. Kang, M., **Zhu, W.**, Ragan, B. (2002). Finding association rules among outside physical activities in elementary school children. *Research Quarterly for Exercise and Sport*, 73(Suppl 1), A-37 - A-38.
77. Kang, M., Frogley, M., **Zhu, W.**, Ragan, B. (2002). Exercise and physical activity barriers of children and youth with physical disabilities. *Medicine & Science in Sports & Exercise*, 34(Suppl 5), S167.
78. Liu, Y., & **Zhu, W.** (2002). Simultaneous analysis of compositional data: A review. *Research Quarterly for Exercise and Sport*, 73(Suppl 1), A-35.
79. Miyamoto, J., **Zhu, W.**, Kang, M., & Washburn, R. (2002). Accuracy of physical activity intensity classification in non-student, middle-age adults. *Medicine & Science in Sports & Exercise*, 34(Suppl 5), S207.
80. Ragan, B., **Zhu, W.**, Frogley, M., & Kang, M. (2002). Evidence of construct validity for a barrier perception scale. *Medicine & Science in Sports & Exercise*, 34(Suppl 5), S38.
81. Ragan, B., **Zhu, W.**, Kang, M., & Flegel, M. (2002). Construction of an ankle injury diagnostic decision tree. *Research Quarterly for Exercise and Sport*, 73(Suppl 1), A-38.
82. Ragan, B., **Zhu, W.**, & Liu, Y. (2002). Analysis of dietary composition of fat, protein, and carbohydrates in obese women. *Research Quarterly for Exercise and Sport*, 73(Suppl 1), A-36.
83. Zhang, L., Zheng, K., Liu, M., Xie, C.D.H., Wang, R., **Zhu, W.** (2002). Comparative on health, bodybuilding, acts of middle-age and senior urban women in Shenyang and Shanghai. *Medicine & Science in Sports & Exercise*, 34(Suppl 5), 12 (Sixth IOC World Congress on Sport Sciences).
84. **Zhu, W.** (2002). Data mining and knowledge discovery in databases: An overview. *Research Quarterly for Exercise and Sport*, 73(Suppl 1), A-37.
85. **Zhu, W.**, Ainsworth, B., Liu, Y. (2002). A comparison of urban black and white women's physical activity patterns. *Research Quarterly for Exercise and Sport*, 73(Suppl 1), A-36.
86. **Zhu, W.**, Washburn, R., Kang, M., & Miyamoto, J. (2002). Perceptions of physical activity intensity in young adults: A preliminary investigation. *Medicine & Science in Sports & Exercise*, 34(Suppl 5), S123.

2003

87. Gao, Y., & **Zhu, W.** (2003). The Angoff method and its extensions for setting cut-off scores.

- Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-96.
88. Kang, M., & **Zhu, W.** (2003). Setting performance standards using the bookmark procedure. *Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-96.
  89. Kang, M., **Zhu, W.**, Tudor-Locke, C., & Ainsworth, B.E. (2003). An experimental determination of the best missing-value recovery method in assessing physical activity using pedometers. *Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-25 – A-26.
  90. Lee, M., & **Zhu, W.** (2003). Generalized examinee-centered method for determining cut-off scores. *Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-96-A97.
  91. Ragan, B., & **Zhu, W.** (2003). Review of commonly used statistical software for multilevel analysis. *Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-94-A95.
  92. Ragan, B., & **Zhu, W.** (2003). Selecting and training judges for setting performance standards. *Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-97.
  93. Hsu, S. Y., & **Zhu, W.** (2003). Challenges in setting performance standards in physical education for students with disabilities. Ragan, B., & Zhu, W. (2003). Review of commonly used statistical software for multilevel analysis. *Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-97.
  94. Tripp, A., **Zhu, W.**, Hsu, S.Y., & Quinn, S. (2003). A survey of urban teachers' assessment practice. *Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-27.
  95. **Zhu, W.** (2003). Changes in setting performance standards: An overview. *Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-95-A96.
  96. **Zhu, W.** (2003). Challenges and possible solutions of diary collection and analysis: A review. *Medicine & Science in Sports & Exercise*, 35(Suppl 5), S396.
  97. **Zhu, W.** (2003). Multilevel research design and data analysis: An overview. *Research Quarterly for Exercise and Sport*, 74(Suppl 1), A-94.

2004

98. Gao, Y., Lee, M., **Zhu, W.**, Ragan, B., & Yilmaz, T. (2004). Physical activity space of blind individuals: A preliminary investigation. *Research Quarterly for Exercise and Sport*, 75(Suppl 1), A-125-126.
99. Gao, Y., & **Zhu, W.** (2004). Score reporting in test accommodation. *Research Quarterly for Exercise and Sport*, 75(Suppl 1), A-138.
100. Kang, M., Ragan, B., & **Zhu, W.** (2004). Statistical analysis of spatial behavior. *Research Quarterly for Exercise and Sport*, 75(Suppl 1), A-125.
101. Lee, M., Park, C.H., **Zhu, W.**, Kang, M., & Yilmaz, T. (2004). Walking space and behaviors of older adults. *Research Quarterly for Exercise and Sport*, 75(Suppl 1), A-126.
102. Lee, M., & **Zhu, W.** (2004). Decision process and models for test accommodations. *Research*

- Quarterly for Exercise and Sport*, 75(Suppl 1), A-138.
103. **Zhu, W.** (2004). Pattern analysis of missing data. *Research Quarterly for Exercise and Sport*, 75(Suppl 1), A-127.
  104. Lee, M., Park, C.H., **Zhu, W.**, Kang, M., & Yilmaz, T. (2004). Walking space and behaviors of older adults. *Research Quarterly for Exercise and Sport*, 75(Suppl 1), A-128.
  105. **Zhu, W.** (2004). Physical activity space: An overview. *Research Quarterly for Exercise and Sport*, 75(Suppl 1), A-124.
  106. **Zhu, W.** (2004). Principle, practice, and challenges of test accommodations. *Research Quarterly for Exercise and Sport*, 75(Suppl 1), A-137.
  107. Kang, M., Keylock, T., & **Zhu, W.** (2004). Experimental investigation of accuracy of energy expenditure estimation of a pedometer. *Medicine & Science in Sports & Exercise*, 36(Suppl 5), S31.
  108. Lee, M., & **Zhu, W.** (2004). ADL and chronic diseases in Chinese older adults. *Medicine & Science in Sports & Exercise*, 36(Suppl 5), S192.
  109. Ragan, B., Kang, M., Marquez, T., Bell, G.W., **Zhu, W.** (2004). Graphic pain rating scale reliability using generalizability theory. *Medicine & Science in Sports & Exercise*, 36(Suppl 5), S295.
  110. **Zhu, W.** (2004). Survey response rates of an equating pilot study. *Medicine & Science in Sports & Exercise*, 36(Suppl 5), S122.

#### 2005

111. Bascolo, M., Ragan, B., & **Zhu, W.** (2005). Which reliability: Instrument or behavior? *Research Quarterly for Exercise and Sport*, 76(Suppl 1), A-6 & 7.
112. Gao, Y., Boscolo, M., Krahling, H., **Zhu, W.**, & Lee, M. (2005). Step-count accuracy and instrument equivalence of McDonalds' stepometers. *Medicine & Science in Sports & Exercise*, 37(Suppl 5), S117.
113. Gao, Y., & **Zhu, W.** (2005). Issues of MET scoring in obesity. *Research Quarterly for Exercise and Sport*, 76(Suppl 1), A-23.
114. Kang, M., **Zhu, W.**, & Kang, S.-J. (2005). Cognitive related characteristics of children's physical activity recall. *Medicine & Science in Sports & Exercise*, 37(Suppl 5), S111.
115. Lee, M., & **Zhu, W.** (2005). MET values and individuals with disabilities. *Research Quarterly for Exercise and Sport*, 76(Suppl 1), A-22.
116. Lee, M., **Zhu, W.**, Gao, Y., Hedrick, B., Crawford, J., Gilbert, M., Frogley, M., & Morse, M. (2005). *Medicine & Science in Sports & Exercise*, 37(Suppl 5), S101.
117. Lee, M., **Zhu, W.**, & Ulrich, D.A. (2005). Many-faceted Rasch calibration of TGMD-2. *Research Quarterly for Exercise and Sport*, 76(Suppl 1), A-116.



118. Park, J.H., Kang, M., & **Zhu, W.** (2005). Validity evidence? *Research Quarterly for Exercise and Sport*, 76(Suppl 1), A-6.
119. Park, Y., & **Zhu, W.** (2005). Which correlation coefficient? *Research Quarterly for Exercise and Sport*, 76(Suppl 1), A-7.
120. Shin, S., Do, K., & **Zhu, W.** (2005). Which criterion measure? *Research Quarterly for Exercise and Sport*, 76(Suppl 1), A-6.
121. Yang, L., Park, Y., & **Zhu, W.** (2005). CDC obesity standards: Norm-referenced or criterion-referenced? *Medicine & Science in Sports & Exercise*, 37(Suppl 5), S300.
122. **Zhu, W.** (2005). MET values and aging population. *Research Quarterly for Exercise and Sport*, 76(Suppl 1), A-22.
123. **Zhu, W.** (2005). Psychometric issues in assessment of attitudes toward individuals with disabilities. *Research Quarterly for Exercise and Sport*, 76(Suppl 1), A-12.

2006

124. Boscolo, M., **Zhu, W.**, & Lee, M. (2006). Too accurate to become “reliable?” *Medicine & Science in Sport & Exercise*, 38(Suppl 5), S529.
125. Jae, S., Heffernan, K. S., Lee, M., Mojtahedi, M. C., Evans, E. C., **Zhu, W.**, & Fernhall, B. (in press). Effects of acute isometric exercise on arterial stiffness in persons with paraplegia. *Medicine & Science in Sport & Exercise*, 38(Suppl 5), S182.
126. Lee, M., Kim, M., & **Zhu, W.** (2006). Invariance of Omron-BI pedometers in free-living: A preliminary study. *Medicine & Science in Sport & Exercise*, 38(Suppl 5), S558.
127. Lee, M., & **Zhu, W.** (2006). Large variability in adapted physical activity research. *Research Quarterly for Exercise and Sport*, 77(Suppl 1), A-15-16.
128. Lee, M., **Zhu, W.**, Yang, L., Gao, Y., Hedrick, B., Frogley, M., & Gilbert, M. (2006). Physical and psychological profiles of wheelchair athletes. *Research Quarterly for Exercise and Sport*, 77(Suppl 1), A-38.
129. Shin, S. **Zhu, W.**, & Lee, M. (2006). Assessing energy expenditure using LifeShirt: A case study. *Medicine & Science in Sport & Exercise*, 38(Suppl 5), S103.
130. Scott, J.A., Motl, R.W., **Zhu, W.**, Snook, E.M., & McAuley, E. (2006). Reliability and validity evidence of physical activity measures in individuals with multiple sclerosis. *Medicine & Science in Sport & Exercise*, 38(Suppl 5), S555.
131. **Zhu, W.** (2006). Designing studies and analyzing data with small *n*. *Research Quarterly for Exercise and Sport*, 77(Suppl 1), A-16.
132. **Zhu, W.** (2006). Evidence-centered assessment design: Principle and practice. *Research Quarterly for Exercise and Sport*, 77(Suppl 1), A-17.

133. **Zhu, W.**, Hasegawa-Johnson, M., Roth, D., Kantor, A., Gao, Y., Gandhi, M.A., Park, Y., & Yang, L. (2006). Validation of an E-diary system for assessing physical activities. *Medicine & Science in Sport & Exercise*, 38(Suppl 5), S102-103.

134. **Zhu, W.**, & Kim, M. (2006). Analyzing Likert scale data using item response theory unfolding model. *Research Quarterly for Exercise and Sport*, 77(Suppl 1), A-41-42.

2007

135. Boscolo, M.S., & **Zhu, W.** (2007). Personal digital assistant platform for computerized adaptive testing of function assessment. *Research Quarterly for Exercise and Sport*, 78(Suppl 1), A-7.

136. Jae, S.Y., Heffernan, K.S., Lee, M., Fahs, C.A., **Zhu, W.**, Fernhall, B. (2007). Carotid artery stiffness and aortic augmentation index in physically active persons with spinal cord injury. *Medicine & Science in Sports & Exercise*, 39(Suppl 5), S271.

137. Gao, Y., & **Zhu, W.** (2007). Potential application of generalized estimating equation method in physical activity research: A tutorial. *Research Quarterly for Exercise and Sport*, 78(Suppl 1), A-8.

138. Gao, Y., & **Zhu, W.** (2007). Walking tests to predict VO<sub>2</sub>max: A review. *Medicine & Science in Sports & Exercise*, 39(Suppl 5), S354.

139. Lee, M., & **Zhu, W.** (2007). Computerized adaptive testing for disability research and public service. *Research Quarterly for Exercise and Sport*, 78(Suppl 1), A-7.

140. Lee, M., & **Zhu, W.** (2007). Status and issues in assessing physical activities of persons with spinal cord injury: A review. *Research Quarterly for Exercise and Sport*, 78(Suppl 1), A-100-101.

141. Lee, M., **Zhu, W.**, Yang, L., Bendis, K., & Hernandez, J. (2007). Position invariance of Omron-BI pedometers in older adults. *Medicine & Science in Sports & Exercise*, 39(Suppl 5), S187.

142. Park, Y., & **Zhu, W.** (2007). Social network analysis for studying complex social network phenomena. *Research Quarterly for Exercise and Sport*, 78(Suppl 1), A-7-8.

143. Park, Y., **Zhu, W.**, Gao, Y. (2007). Coder agreement in scoring physical activity diary data using the compendium. *Research Quarterly for Exercise and Sport*, 78(Suppl 1), A-44.

144. **Zhu, W.** (2007). Principle and practice of computerized adaptive testing: An overview. *Research Quarterly for Exercise and Sport*, 78(Suppl 1), A-6-7.

145. **Zhu, W.**, Gao, Y., Park, Y., Yang, L., & Chandrasekhar, D. (2007). Development and validation of a walking space measure. *Research Quarterly for Exercise and Sport*, 78(Suppl 1), A-121.

146. **Zhu, W.**, & Lee, M. (2007). Agent-based modeling of environmental impact on physical activities. *Research Quarterly for Exercise and Sport*, 78(Suppl 1), A-9.

147. **Zhu, W.**, Hasegawa-Johnson, M., Kantor, A., Roth, D., Gao, Y., Park, Y., & Yang, L. (2007). E-coder for automatic scoring physical activity diary data: Development and validation. *Medicine & Science in Sports & Exercise*, 39(Suppl 5), S190.

2008

148. Boscolo, M. S., **Zhu, W.**, Burgener, S., & Zeiders, R. (2008). Qi gong for older adults with lower extremity osteoarthritis: A pilot study. *Medicine & Science in Sports & Exercise*, 40(Suppl 5), S375.
149. Gao, Y., & **Zhu, W.** (2008). Meeting physical activity recommendation or not: Depends on the method. *Research Quarterly for Exercise and Sport*, 79(Suppl 1), A-33.
150. Graber, K.C., Erwin, H.E., Woods, A. M., Rhoades, J., & **Zhu, W.** (2008). Demographic characteristics of physical education teacher educators by Carnegie Classification. *Research Quarterly for Exercise and Sport*, 79(Suppl 1), A-5-6.
151. Gao, Y., & **Zhu, W.** (2008). DIF detection of activity items across Non-Hispanic Whites and Hispanics in NHANES physical activity questionnaire. *Medicine & Science in Sports & Exercise*, 40(Suppl 5), S200.
152. Lee, M., **Zhu, W.**, Brower, D., McMurray, B., Holbrook, E.A., & Gunderson, J. (2008). Perceived physical activity barrier of blind or visually impaired individuals. *Research Quarterly for Exercise and Sport*, 79(Suppl 1), A-99.
153. Lee, M., **Zhu, W.**, Fernhall, B., & Hedrick, B. (2008). Estimating MET values of persons with SCI using heart rate. *Medicine & Science in Sports & Exercise*, 40(Suppl 5), S205.
154. Lee, M., **Zhu, W.**, Fernhall, B., & Hedrick, B. (2008). Physical activity compendium supplement for persons with disabilities. *Research Quarterly for Exercise and Sport*, 79(Suppl 1), A-84.
155. Li, S., Zhu, W., Park, S.-H., & Lin, J. (2008). Monitoring glucose and physical activity using mobile phone: A proposed system. *Medicine & Science in Sports & Exercise*, 40(Suppl 5), S427-428.
156. Morrow, J.R., Daniel, R., & **Zhu, W.** (2008). 1958-2008: Fifty years of youth fitness testing. *Research Quarterly for Exercise and Sport*, 79(Suppl 1), A-2-3.
157. Park, Y. & **Zhu, W.** (2008). Finding physical activity pattern using cluster analysis. *Medicine & Science in Sports & Exercise*, 40(Suppl 5), S206.
158. **Zhu, W.**, Nedovic-Budic, Z., Olshansky, R., Gao, Y., Park, Y., Chandrasekhar, D., McAuley, E., Chodzko-Zajko, W., & Marti, J. (2008). Neighborhood characteristics and older adults' walking behavior: A preliminary report. *Medicine & Science in Sports & Exercise*, 40(Suppl 5), S28.

2009

159. Gao, Y., & **Zhu, W.** (2009). Differential item functioning analysis of physical activity disparities in the USA. *Research Quarterly for Exercise and Sport*, 80(Suppl 1), A-118.
160. Lee, M., Boscolo, M., **Zhu, W.**, & Pitchford, E.A. (2009). Interactive game technology: Make behavior change fun! *Research Quarterly for Exercise and Sport*, 80(Suppl 1), A-9.
161. Park, S-H., & **Zhu, W.** (2009). Remote physical activity intervention using sensor, wireless, and internet technologies. *Research Quarterly for Exercise and Sport*, 80(Suppl 1), A-8.

162. Park, Y., **Zhu, W.**, & Ulrich, D.A. (2009). Finding unexpected response patterns in TGMD-2 using social network analysis. *Research Quarterly for Exercise and Sport*, 80(Suppl 1), A-42-43.
163. Placek, J., Fox, C., **Zhu, W.**, Graber, Fiset, J.L., Avery, M., Franck, M., Dyson, B., Park, Y. (2009). PE Metrics Standard 1, Elementary: Development of an assessment item/task bank. *Research Quarterly for Exercise and Sport*, 80(Suppl 1), A-43-44.
164. Shin, S., Nam, D.H., Kang, S.K., Park, S.H., **Zhu, W.** (May, 2009). Effects of stepping pattern and speed on energy expenditure. *Medicine & Science in Sports & Exercise*, 41(Suppl 5), S393.
165. Wang, R., **Zhu, W.**, Yuan, Z., Lu, H., Li, Q., Gao, Y., Fan, L., Wang, J., Rowland, K.M., Courneya, K.S., & Schneider, C. (May, 2009). Effects of long-term Guo Lin Qi-gong practice on cancer survivors' quality of life and aerobic capacity: A preliminary report. *Medicine & Science in Sports & Exercise*, 41(Suppl 5), S83.
166. Yong, G., & **Zhu, W.** (May, 2009). Identifying culturally sensitive physical activities using DIF analysis. *Medicine & Science in Sports & Exercise*, 41(Suppl 5), S507-8.
167. Youm, S-K., Park, S-H., **Zhu, W.** (2009). Tracking health behaviors using radio frequency identification technology. *Research Quarterly for Exercise and Sport*, 80(Suppl 1), A-9.
168. **Zhu, W.** (2009). Persuasive technology: What, why, and how? *Research Quarterly for Exercise and Sport*, 80(Suppl 1), A-8.

2010

169. Boiarskaia, E., & **Zhu, W.**, Mahar, M. (2010). A cross-validation study of an equating method linking field fitness tests. *Medicine & Science in Sports & Exercise*, 42(5), 14-15.
170. Fan, L., Wang, R., & **Zhu, W.** (2010). Accuracy and consistency of examining energy expenditure in Gou-lin Qi-gong using the compendium of physical activity. *Medicine & Science in Sports & Exercise*, 42(5), 810.
171. Gao, Y., & **Zhu, W.** (2010). Physical activity expenditure by activity domains in US populations. *Medicine & Science in Sports & Exercise*, 42(5), 456.
172. Guan, S., & **Zhu, W.**, & Youm, S.-K. (2010). Concurrent validity evidence of common physical activity measures: A meta-analysis. *Research Quarterly for Exercise and Sport*, 81(Suppl 1), A-32-33.
173. Khosravinasr, S., & **Zhu, W.** (2010). Cell phone for tracking physical activity space: A case study. *Research Quarterly for Exercise and Sport*, 81(Suppl 1), A-34.
174. Teo, E.W., **Zhu, W.**, & Guan, S. (2010). Data characteristics of common health, fitness, and physical activity measures. *Research Quarterly for Exercise and Sport*, 81(Suppl 1), A-36.
175. Teo, E.W., & **Zhu, W.** (2010). Fitness level and obesity rate among indigenous children of Semelai tribe, Malaysia. *Medicine & Science in Sports & Exercise*, 42(5), 714-715.

176. Wang, J., & **Zhu, W.** (2010). Effects of Resistance training on resting blood pressure: A meta-analysis of randomized controlled trails. *Medicine & Science in Sports & Exercise*, 42(5), 297.
177. Wang, R., **Zhu, W.**, Yuan, Z., McAuley, E., Fan, L., Lu, H., & Zhou, P. (2010). Social support for physical activity in cancer survivorship: A survey study. *Medicine & Science in Sports & Exercise*, 42(5), 161.
178. Yu, H., Chen, X., & **Zhu, W.** (2010). Characteristics of endurance load of a successful training program for Chinese top speed skaters. *Medicine & Science in Sports & Exercise*, 42(5), 175.
179. **Zhu, W.** (2010). Sadly, the earth is still around “ $p < .05$ ”. *Research Quarterly for Exercise and Sport*, 81(Suppl 1), A-6-7.
180. **Zhu, W.**, Wang, R., Yuan, Z., Fan, L., Lu, H., & Zhou, P. (2010). Gou-lin Qi-gong exercise for cancer care practice: a Preliminary Report. *Medicine & Science in Sports & Exercise*, 42(5), 160.

#### 2011

181. Boiarskaia, E., Das, B., **Zhu, W.**, Welk, G., & Meredith, M. (2011). Physical education teacher responses to mandatory FITNESSGRAM. *Research Quartely for Exercise and Sport*, 82(Suppl 1), A-26.
182. Li, Q., Zhu, W., Li, M., & Tan, J. (2011). Perceived barriers to exercise and physical activity among persons with diabetes. *Medicine & Science in Sports & Exercise*, 43(5), S102.
183. Teo, E. W., Zhu, W., & Ulrich, D. (2011). Development of short-TGMD-2 using Rasch item-reduction approach. *Medicine & Science in Sports & Exercise*, 43(5), S484.
184. Wang, R., & **Zhu, W.** (2011). Meta-regression for dose-response research. *Research Quartely for Exercise and Sport*, 82(Suppl 1), A-6.
185. **Zhu, W.** (2011). Approaches for development of criterion-referenced standards in youth. *Research Quartely for Exercise and Sport*, 82(Suppl 1), A-1.
186. **Zhu, W.** (2011). Dose-response issues and challenges in physical activity research. *Research Quartely for Exercise and Sport*, 82(Suppl 1), A-6.
187. **Zhu, W.**, & Boiarskaia, E. (2011). Assessing physical function using CAT: A measurement utility study. *Medicine & Science in Sports & Exercise*, 43(5), S572.

#### 2012

188. Park, Y. & **Zhu, W.** (2012). Commonly used statistical indexes and software for sensitivity determination. *Research Quarterly for Exercise and Sport*, 83 (Suppl. 1), A-5. Retrieved from <http://www.aahperd.org/rc/publications/rqes/Indexes.cfm>
189. **Zhu, W.** (2012). Measurement sensitivity: What, why, and how? *Research Quarterly for Exercise and Sport*, 83 (Suppl. 1), A-4. Retrieved from <http://www.aahperd.org/rc/publications/rqes/Indexes.cfm>
190. Chen, P., Zou, Y., Shi, S., & Zhu, W. (2012). BMI growth curve of children in Jiangsu, China: 6-18 yr. old. *Medicine & Science in Sports & Exercise*, 44(5), S870-871.
191. Fan, B., Liu, X., Zhang, C., & Zhu, W. (2012). Changes in health-related physical physique measures of Shanghai older males between 2000 and 2010. *Medicine & Science in Sports & Exercise*, 44(5), S817.
192. Peng, L., Luo, J., Wu, J., & Zhu, W. (2012). Predictive validity of rating of perceived exertion: A cross-culture validation. *Medicine & Science in Sports & Exercise*, 44(5), S753.
193. Zhang, F., Andrade, F., & Zhu, W. (2012). Educational achievement and career transition among Chinese elite athletes after retirement. *Medicine & Science in Sports & Exercise*, 44(5), S461.
194. Yu, H., Zhu, W., Qiu, J., & Zhang, C. (2012). Physical activity scale for elderly (PASE): A cross-validation study for Chinese older adults. *Medicine & Science in Sports & Exercise*, 44(5), S461.
195. Zhang, C., Fan, B., Liu, X., & Zhu, W. (2012). Fitness secular trends of Shanghai older women and local district impact: 2000-2010. *Medicine & Science in Sports & Exercise*, 44(5), S816.
196. Zhang, F., Andrade, F., & Zhu, W. (2012). Educational achievement and career transition among Chinese elite athletes after retirement. *Medicine & Science in Sports & Exercise*, 44(5), S461.
197. Zhu, W., & Boiarskaia, E. (2012). A Pareto principle (20-80 rule) analysis of daily physical activity and diabetes impact. *Medicine & Science in Sports & Exercise*, 44(5), S497.

2013

198. Teatro, C., Kulinna, P.H., Zhu, W., Boiarskaia, E., & Wilde, B (2013). Validating middle school fitness knowledge assessments. *Research Quarterly for Exercise and Sport*, 84 (Suppl. 1), A-30. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/02701367.2013.777304>

199. Zhu, W., (2013). Mediation variables and mediation analysis: What and why? *Research Quarterly for Exercise and Sport*, 84 (Suppl. 1), A-6. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/02701367.2013.777304>
200. Zhu, W. (2013). Since and art of setting standards (cutoff scores) in Kinesiology. *Research Quarterly for Exercise and Sport*, 84 (Suppl. 1), A-6. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/02701367.2013.777304>

#### Online Abstracts

201. Brower, D., Lee, M., Kim, M., & **Zhu, W.** (2008). A validation study of talking pedometers for blind and visually impaired individuals. *Medicine & Science in Sport & Exercise* (walking conference supplement)
202. Chun, H., Lee, M., & **Zhu, W.** (2008). A validation study of armband device for measuring energy expenditure in wheelchair athletes. *Medicine & Science in Sport & Exercise* (walking conference supplement)

#### F. Other Published Materials

1. Corbin, C.B., Lindsey, R., & **Zhu, W.** (1994). *Testpak* (a computerized testing program that accompanies the 8th edition of *Concepts of Physical Fitness*). Dubuque, IA: Wm. C. Brown Publishers.
2. Ntiri, D.W., Robinson, G., & **Zhu, W.** (1996). *Evaluation in adult literacy: Research project ALERT, Phase II*. Detroit, MI: Detroit Literacy Coalition.
3. Kang, S.-J., & Chuan, H.-J., Hyang, S.-C., Han, M.-K., & **Zhu, W.** (1998). A Korean national survey of fitness status and gross-motor function of individuals with disabilities. Abstract collections of 1998 North American Federation of Adapted Physical Activity (abst., p. 25). Minneapolis, MN: MAFAPA.
4. **Zhu, W.**, & Kang, S.-J. (1998). Test equating: Why adapted physical education professionals need it. Abstract collections of 1998 North American Federation of Adapted Physical Activity (abst., p. 25). Minneapolis, MN: MAFAPA.
5. **Zhu, W.**, Safrit, M.J., & Cohen, A.S. (1999). *FitSmart: The national health-related physical fitness knowledge test* (both in paper and in CD-Rom formats). Champaign, IL: Human Kinetics. (Note: FitSmart is a large-scale standardized physical fitness knowledge test, with two equivalent forms, targeting to high school students. The test is calibrated using the Rasch model, an advanced measurement model, with a total of 4,025 high school students).
6. Kulinna, P.H., Cothran, D.J., & **Zhu, W.** (2000). Teachers' experiences with and perceptions of Mosston's Spectrum: How do they compare with students? Detroit, Wayne State University. (ERIC Document Reproduction Service No. ED440949).
7. **Zhu, W.** (2005; as one of the contributors). National expert meeting on Qi gong and Tai Chi: Consensus report. National Blueprint Office, Urbana, IL.

8. Lin, Y., Lee, M., **Zhu, W.**, Kalck, K., & Bendis, K. (April, 2006). Impact of obesity on accuracy of Omron-BI pedometers. International Congress on Physical Activity and Public Health (abst. p. 91). US. Dept. of Health & Human Services/CDC, Atlanta, GA.
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## **II. RESEARCH: PAPERS PRESENTED**

### **A. Invited and/or Refereed Internationally or Nationally**

1988-1991

1. Safrit, M.J., & **Zhu, W.** (1988). *A bank of tests in physical education, NASPE outcome project*. Paper presented at the 1988 AAHPERD Conference, Kansas City.
2. Safrit, M. J., & **Zhu, W.** (1989). *Assessment matrix for physical education, NASPE outcome project*. Paper presented at the 1989 AAHPERD Conference, Boston.
3. **Zhu, W.**, & Safrit, M.J. (1989). *The effect of varying cutoff scores on the underlying domain of items*. Paper presented at the Sixth Measurement and Evaluation Symposium, Madison.
4. Safrit, M.J., **Zhu, W.**, Gao, L., & Kalohn, J. (1989). *Item response theory and adaptive testing*. Paper presented at the Sixth Measurement and Evaluation Symposium, Madison.
5. **Zhu, W.**, & Safrit, M.J. (1990). *Age and gender factors in setting health fitness standards for Physical Best: Age 10 - 18*. Paper presented at the 1990 AAHPERD Conference, New Orleans.
6. **Zhu, W.**, & Safrit, M.J. (1991). *Recovery of item and ability parameters for the Rasch Poisson Counts model: A monte carlo study*. Paper presented at the National Council on Measurement in Education 1991 Annual Meeting, Chicago.
7. **Zhu, W.**, & Safrit, M.J. (1991). *The calibration of a sit-up task using the Rasch Poisson Count model*. Paper presented at the AAHPERD 1991 National Convention, San Francisco.

1992

8. Krause, J. & **Zhu, W.** (1992). *An investigation of urban children's physical fitness*. Paper presented at the 1992 AAHPERD National Convention, Indianapolis.
9. **Zhu, W.**, & Krause, J. (1992). *Physical fitness screening of inner-city children and youth*. Paper presented at the 1992 American College of Sports Medicine Annual Meeting, Dallas.
10. Smith, C.R., Wirth, J.C., Blievernicht, D., Engels, H.-J., & **Zhu, W.** (1992). *Isokinetic strength measures in elite female adolescent soccer players*. Paper presented at the 1992 International Conference on Physical Activity, Fitness & Health, Toronto, Canada.
11. Smoczyk, C.M. & **Zhu, W.** (1992). *An instrument for measuring cancer patients' preferences for support groups*. Paper presented at the 1992 AAHPERD National Convention, Indianapolis.



12. **Zhu, W.** (1992). *Assessment of fitness knowledge: Yesterday, today, and tomorrow*. Paper presented at the 1992 AAHPERD National Convention, Indianapolis.
13. **Zhu, W.** (1992). *Improving testing capability by applying multimedia technology*. Paper presented at the 1992 AAHPERD National Convention, Indianapolis.
14. **Zhu, W.** (1992). *Development of a computerized visual testing model*. Paper presented at the International Conference on computer Application in Sport and Physical Education, Israel.
15. **Zhu, W., & Krause, J.** (1992). *Impact of the inner-city physical education programs on physical fitness of children and youth*. Paper presented at the 1992 International Conference on Physical Activity, Fitness & Health, Toronto, Canada.
16. **Zhu, W., & Krause, J.** (1992). *Physical Fitness Screening of Inner-City Children and Youth*. Paper presented at the 1992 American College of Sports Medicine Annual Meeting, Dallas.
17. **Zhu, W.** (1992). *Multimedia testing by IBM LinkWay*. Microcomputer software presented at the 1992 AAHPERD National Convention, Indianapolis.
18. **Zhu, W. & Kurz-McPherson, K.A.** (1992). *Partial Credit analysis of gross motor development*. Paper presented at the Measurement and Evaluation Symposium, AAHPERD Measurement and Evaluation Council, Athens, Georgia.
19. **Zhu, W. & Safrit, M.J.** (1992). *Development of a concept of "difficulty band" for the Rasch Poisson Counts model*. Paper presented at the 57th Annual Meeting of The Psychometric Society, Columbus, Ohio.

1993

20. Krause, J. & **Zhu, W.** (1993). *Physical fitness characteristics of inner-city children: A three-year observation*. Paper presented at the 1993 American College of Sports Medicine Annual Meeting, Seattle, WA.
21. **Zhu, W.** (1993). *Bootstrap estimation of the parameter of One-Mile Run/Walk performance*. Paper presented at the 1993 Midwest District Association for Health, Physical Education, Recreation & Dance.
22. **Zhu, W.** (1993). *Meta-analysis: Confidence profile method*. Paper presented at the 1993 AAHPERD National Convention in Washington, D.C.
23. **Zhu, W.** (1993). *Partial Credit and rating scale models and their applications of assessing motor behavior*. Paper presented at the AAHPERD 1993 National Convention, Washington, DC.
24. **Zhu, W.** (1993). *Problems and solution of analyzing hierarchical data: A fitness illustration*. Paper presented at the International University Sports Federation Conference, Buffalo '93.
25. **Zhu, W., Cook, S., Fields, J., Gleason, J. Gant, L., & Randall, L.** (1993). *Current HIV/AIDS risk factors in Detroit*. Paper presented at the American Public Health Association 121st annual meeting, San Francisco.

26. **Zhu, W.**, Ennis, C.D., & Chen, A. (1993). *Assessing rating behavior using the Many-faceted Rasch Model*. Paper presented at the 1993 American Educational Research Association Annual Meeting, Atlanta, GA.
27. **Zhu, W.**, & Erbaugh, S.J. (1993). *Assessing change in swimming skills using hierarchical linear model*. Paper presented at the International University Sports Federation Conference, Buffalo '93.
28. **Zhu, W.**, & Ruhm, C. (1993). *Calibration of a youth leadership instrument using the Many-faceted Rasch model*. Paper presented at the Seventh International Objective Measurement Workshop, 1993, Atlanta, GA.
29. **Zhu, W.**, & Wirth, J.C. (1993). *Examining validity evidence of criterion- referenced health standards using cluster analysis*. Paper presented at the AAHPERD 1993 National Convention, Washington, DC.

1994

30. Cardinal, B.J., **Zhu, W.**, & Sachs, M.L. (1994). *Effects of three formats of physical activity and exercise behavior change programs on female adults' 7-month physical activity behavior*. Paper presented at the 1994 American College of Sports Medicine Annual Meeting, Indianapolis.
31. Cole, L.E., & **Zhu, W.** (1994). *IRT person fit statistics to diagnose motor function*. Paper presented at the AAHPERD 1994 National Convention, Denver, Colorado.
32. Cook, S., Fields, J., & **Zhu, W.** (1994). *Media, HIV/AIDS and the inner-city populations*. Paper presented at the AAHPERD 1994 National Convention, Denver, Colorado.
33. Safrit, M.J., **Zhu, W.**, & Cohen, A.S. (1994). *The evaluation of physical fitness knowledge*. Paper presented at the World Congress Physical Education and Sport '94 Changes and Challenges, AIESEP, Berlin, Germany.
34. **Zhu, W.** (1994). *Analysis of a Likert scale using MULTILOG*. Paper presented at the AAHPERD 1994 National Convention, Denver, Colorado.
35. **Zhu, W.** (1994). *Application of classical and modern testing theories in PE and exercise science*. Paper presented at Nanjing Physical Culture Institute, Nanjing, China.
36. **Zhu, W.** (1994). *The basis of item response theory*. Paper presented at the AAHPERD 1994 National Convention, Denver, Colorado.
37. **Zhu, W.** (1994). *Bootstrap estimation of a population's physical fitness status using small samples*. Paper presented at the 1994 American College of Sports Medicine Annual Meeting, Indianapolis.
38. **Zhu, W.** (1994). *Cluster analysis of structure of a motor function instrument*. Paper presented at the Symposium 1994 of North American Federation on Adapted Physical Activity, East Lansing, Michigan.
39. **Zhu, W.** (1994). *Computer-intensive statistics and assessment of motor behavior*. Paper presented at the World Congress Physical Education and Sport '94 Changes and Challenges, AIESEP, Berlin, Germany.

40. **Zhu, W.** (1994). *Construction of assessment instruments using item response theory*. Paper presented at the Symposium 1994 of North American Federation on Adapted Physical Activity, East Lansing, Michigan.
41. **Zhu, W.** (1994). *Current developments of measurement and evaluation in exercise sport science*. Paper presented at the Shanghai Physical Culture Institute, Shanghai, China.
42. **Zhu, W.** (1994). *Many-faceted Rasch analysis of a developmental checklist*. Paper presented at 1994 annual meeting of American Education Research Association, New Orleans, Louisiana.
43. **Zhu, W.** (1994). *Resampling statistics for teaching and research*. Paper presented at the AAHPERD 1994 National Convention, Denver, Colorado.
44. **Zhu, W., & Cole, L.E.** (1994). *Many-faceted Rasch calibration of a gross-motor instrument*. Paper presented at the World Congress Physical Education and Sport '94 Changes and Challenges, AIESEP, Berlin, Germany.
45. **Zhu, W., Safrit, M.J., & Cohen, A.S.** (1994). *Development of a high school physical fitness knowledge test: A preliminary report*. Paper presented at the AAHPERD 1994 National Convention, Denver, Colorado.

1995

46. Engels, H.-J., Said, J., Wirth, J.C., & **Zhu, W.** (1995). *Effect of chronic Ginseng intake on metabolic responses during graded exercise and in the recovery from exercise*. Paper presented at the 1995 American College of Sports Medicine Annual Meeting, Minneapolis, Minnesota.
47. Gleason-Comstock, J., McCoy, R., **Zhu, W.**, Gant, L., & Sankar, A. (1995). *Planning Greater Detroit HIV/AIDS continuum of care: Consumer perception of health and service needs*. Paper presented at the APA 1995 National Convention, Washington, DC.
48. **Zhu, W.** (1995). *Analysis of item response patterns for diagnosing motor proficiency of special populations*. Paper presented at the AAHPERD 1995 National Convention, Portland, Oregon.
49. **Zhu, W.** (1995). *How to determine validity, reliability, and criterion of alternative tests*. Paper presented at the AAHPERD 1995 National Convention, Portland, Oregon.
50. **Zhu, W.** (1995). *Introduction to bootstrapping statistical inference*. Special lecture presented at the 1995 KNUPE International Symposium, Korean National University of Physical Education, Seoul, Korea.
51. **Zhu, W.** (1995). *Person fit statistics for diagnosis of proficiency*. Paper presented at the Eighth International Objective Measurement Workshop, San Francisco, CA.
52. **Zhu, W.** (1995). *Rasch modeling of motor performance*. Paper presented at the 1995 KNUPE International Symposium, Korean National University of Physical Education, Seoul, Korea.
53. **Zhu, W., Engels, H.-J., Maffatt, R.J.** (1995). *Prediction error of maximal heart rate: Bootstrapping vs. cross-validation*. Paper presented at the 1995 American College of Sports Medicine Annual

Meeting, Minneapolis, Minnesota.

54. **Zhu, W.**, & Kurz, K.A. (1995). *Rasch Partial Credit modeling for theory of developmental sequence*. Paper presented at the 1995 annual meeting of American Education Research Association, San Francisco, California.
55. **Zhu, W.**, Safrit, M.J., & Cohen, A.S. (1995). *Development of a high school physical fitness knowledge test: A follow-up*. Paper presented at the AAHPERD 1995 National Convention, Portland, Oregon.

1996

56. Cardinal, B.J., Engels, H.-J., & **Zhu, W.** (1996). *The stages of exercise in children*. Paper presented at the 1996 American College of Sports Medicine Annual Meeting, Cincinnati, OH.
57. Erbaugh, S.J., **Zhu, W.**, & Langendorfer, S. (1996). *A survey of parental attitudes/observations about children's water safety and water skillfulness*. Paper presented at the AAHPERD 1996 National Convention, Atlanta, Georgia.
58. Feng, S., **Zhu, W.**, & Engels, H.-J. (1996). *Validation of a scale of beliefs about exercise in elementary school children*. Paper presented at the 1996 American College of Sports Medicine Annual Meeting, Cincinnati, OH.
59. Feng, S., **Zhu, W.**, & Engels, H.-J. (1996). *Rasch equating of two parallel forms of a children's exercise knowledge test*. Paper presented at the 8th Measurement and Evaluation Symposium: Exploring the Kaleidoscope, Corvallis, OR.
60. Shin, S., & **Zhu, W.** (1996). *A comparison of Korean and American children and youth on selected fitness variables*. Paper presented at the 1996 American College of Sports Medicine Annual Meeting, Cincinnati, OH.
61. **Zhu, W.** (1996). *A leaf tells the story: A commentary on James and Bates' paper*. Paper presented at the 8th Measurement and Evaluation Symposium: Exploring the Kaleidoscope, Corvallis, OR.
62. **Zhu, W.** (1996). *Many-faceted Rasch analysis of children's change in self-efficacy*. Paper presented at the 1996 annual meeting of the American Education Research Association, New York.
63. **Zhu, W.** (1996). *N=2,372 or N=54?* Paper presented at the 1996 American College of Sports Medicine Annual Meeting, Cincinnati, OH.
64. **Zhu, W.** (1996). *Predictive validity of skinfold measures: A meta-analysis*. Paper presented at the AAHPERD 1996 National Convention, Atlanta, Georgia.
65. **Zhu, W.** (1996). *Problems and solutions in developing prediction equations using regression*. Paper presented at the 1996 American College of Sports Medicine Annual Meeting, Cincinnati, OH.
66. **Zhu, W.** (1996). *Utility of Rasch equating: An empirical investigation*. Paper presented at the 8th Measurement and Evaluation Symposium: Exploring the Kaleidoscope, Corvallis, OR.
67. **Zhu, W.**, & Kang, S.-J. (1996). *Rasch equating of new items to a calibrated item pool*. Paper

presented at the 8th Measurement and Evaluation Symposium: Exploring the Kaleidoscope, Corvallis, OR.

68. **Zhu, W.**, & Kurz, K.A. (1996). *Graphical DIF analysis for assessing biased motor items/tasks*. Paper presented at the AAHPERD 1996 National Convention, Atlanta, Georgia.
69. **Zhu, W.**, Engels, H.-J., Erbaugh, S.J., Feng, S., & Dolmote, J. (1996). *Predictors of older adults' self-perceived physical fitness*. Paper presented at the AAHPERD 1996 National Convention, Atlanta, Georgia.
70. **Zhu, W.**, Erbaugh, S.J., Engels, H.-J., Feng, S., Chen, Y., & Dolmote, J. (1996). *An investigation of determinants of older adults' balance*. Paper presented at the AAHPERD 1996 National Convention, Atlanta, Georgia.
71. **Zhu, W.**, Gleason-Comstock, J., McCoy, R., Gant, L., & Sankar, A. (1996). *Development of an instrument measuring people living with HIV/AIDS' preferences of support group*. Paper presented at the AAHPERD 1996 National Convention, Atlanta, Georgia.
72. **Zhu, W.**, Safrit, M.J., & Cohen, A.A. (1996). *Development of a high school physical fitness knowledge test: IRT calibration and equating*. Paper presented at the 8th Measurement and Evaluation Symposium: Exploring the Kaleidoscope, Corvallis, OR.

1997

73. Drouin, J., Lueck, C., Cerullis, L., Franks, M., Engels, H.-J., & **Zhu, W.** (1997). *Exercise training with and without wrist weights in older adults: Effect on muscular fitness and balance*. Paper presented at the 1997 American College of Sports Medicine Annual Meeting, Denver, Colorado.
74. Engels, H.-J., **Zhu, W.**, Benedix, R., Orel, M., Chen, Y., Feng, S., & Smouter, J. (1997). *Evaluation of a Grassroots exercise incentive strategy to improve various facets of health-related fitness in elementary school children*. Paper presented at the AAHPERD 1997 National Convention, St. Louis, MO.
75. Engels, H.-J., **Zhu, W.**, Drouin, J., Timpf, D., Trumbull, A., Percer, P., & Kazmierski, J.F. (1997). *Exercise training with and without weights in older adults: Effect on flexibility, body fat, and peak physiological responses*. Paper presented at the 1997 American College of Sports Medicine Annual Meeting, Denver, Colorado.
76. Feng, S., & **Zhu, W.** (1997). *Equating of English and Chinese versions of a psychomotor self-efficacy scale*. Paper presented at the AAHPERD 1997 National Convention, St. Louis, MO.
77. Kang, S.-J., & **Zhu, W.** (1997). *Categorization stability of a rating scale: A cross-culture study*. Paper presented at the AAHPERD 1997 National Convention, St. Louis, MO.
78. Kang, S.J., & **Zhu, W.** (1997). *How many categories are appropriate to measure sport competition anxiety?* Paper presented at the '97 Seoul International Sport Science Congress Proceedings (pp. 732-754). Seoul, Korea: Korean Alliance for Health, Physical Education, Recreation and Dance.
79. Kang, S.-J., & **Zhu, W.** (1997). *Test equating of international children's sit-up performance*. Paper presented at the AAHPERD 1997 National Convention, St. Louis, MO.

80. Safrit, M.J., & **Zhu, W.** (1997). *Equivalence of commonly used sit-up tests: An empirical investigation*. Paper presented at the AAHPERD 1997 National Convention, St. Louis, MO.
81. **Zhu, W.** (1997). *A new solution for assessing and modeling effects of school physical education programs*. Paper presented at the AAHPERD 1997 National Convention, St. Louis, MO.
82. **Zhu, W.** (1997). *CART analyses of classification of children's physical activeness*. Paper presented at the 1997 American College of Sports Medicine Annual Meeting, Denver, Colorado.
83. **Zhu, W.** (1997). *Hierarchical linear model and applications*. Paper presented at the Korean National University of Physical Education, Seoul, Korea.
84. **Zhu, W.** (1997). *Psychometric problems and possible solution in assessing physical activity using questionnaires*. Paper presented at the '97 Seoul International Sport Science Congress. Seoul, Korea.
85. **Zhu, W.** (1997). *Test equating: What, why, and how?* Paper presented at the AAHPERD 1997 National Convention, St. Louis, MO.
86. **Zhu, W.** (1997). *Youth fitness testing in U.S.* Paper presented at the Yongin University, Yongin Kyunggi, Korea.
87. **Zhu, W.**, Updyke, W., & Lewandowski, C. (1997). *Optimal categorization of a rating scale: A longitudinal study*. Paper presented at the 1997 annual meeting of the American Education Research Association, Chicago.
88. **Zhu, W.**, Updyke, W., & Lewandowski, C. (1997). *Rasch analysis of optimal categorization of a rating scale*. Paper presented at the AAHPERD 1997 National Convention, St. Louis, MO.

1998

89. Chen, A., & **Zhu, W.** (1998). *A retrospective analysis of elementary physical education teacher countability as inferred from their decisions on using fitness tests*. Paper presented at the AAHPERD 1998 National Convention, Reno, Nevada.
90. Chun, H.J., Kang, S.J., & **Zhu, W.** (1998). *Gross-function and movement skills of Korean disable population*. Paper presented at the North American Federation of Adapted Physical Activity 1998 Symposium, Minneapolis, Minnesota.
91. Han, M.K., Kang, S.J., & **Zhu, W.** (1998). *Body composition of Korean disable population: A preliminary report*. Paper presented at the North American Federation of Adapted Physical Activity 1998 Symposium, Minneapolis, Minnesota.
92. Kang, S.J., Chun, H.J, Han, M.K., & **Zhu, W.** (1998). *A Korean national survey of fitness status and gross-motor function of individuals with disabilities*. Paper presented at the North American Federation of Adapted Physical Activity 1998 Symposium, Minneapolis, Minnesota.
93. Kang, S.J., & **Zhu, W.** (1998). *An empirical determination of the equivalence of two arm-hang strength tests*. Paper presented at the North American Federation of Adapted Physical Activity 1998 Symposium, Minneapolis, Minnesota.

94. Kang, S.J., & **Zhu, W.** (1998). *An empirical examination of the equivalence of three upper body strength tests*. Paper presented at the AAHPERD 1998 National Convention, Reno, Nevada.
95. Kang, S.J., & **Zhu, W.** (1998). *An investigation of current physical fitness status of the Korean disable population*. Paper presented at the North American Federation of Adapted Physical Activity 1998 Symposium, Minneapolis, Minnesota.
96. Shin, S., & **Zhu, W.** (1998). *A comparison of international children's running performance*. Paper presented at the AAHPERD 1998 National Convention, Reno, Nevada.
97. **Zhu, W.** (1998). *Modern measurement and statistical theories and practices in physical education and exercise science*. A series of lectures presented in Shanghai Institute of Physical Education, Shanghai, China.
98. **Zhu, W.** (1998). *Youth fitness testing in U.S.* A paper presented in Nanjing Institute of Physical Education, Nanjing, China.
99. **Zhu, W.** (1998). *Test equating of commonly used physical fitness tests*. Paper presented at the AAHPERD 1998 National Convention, Reno, Nevada.
100. **Zhu, W.**, Ainsworth, B., Irwin, M., Hootman, J., Levin, S., & Whitt, M. (1998). *Calibration of an IRT-based bank for assessing physical activity: A preliminary report*. Paper presented at the AAHPERD 1998 National Convention, Reno, Nevada.
101. **Zhu, W.**, & Kang, S.J. (1998). *Equivalence of three commonly used sit-up tests*. Paper presented at the AAHPERD 1998 National Convention, Reno, Nevada.
102. **Zhu, W.**, & Kang, S.J. (1998). *Test equating--why adapted PE professionals need it?* Paper presented for the North American Federation of Adapted Physical Activity 1998 Symposium, Minneapolis, Minnesota.
103. **Zhu, W.**, & Shin, S. (1998). *A cross-population examination of validity of indices of relative weight in children and youth*. Paper presented at the 1998 annual meeting of American College of Sports Medicine Annual Meeting, Orlando, Florida.

1999

104. Guan, J., & **Zhu, W.** (1999). *Validity and reliability of an exercise/physical activity barrier instrument: A preliminary analysis*. Paper presented at the 1999 AAHPERD National Convention, Boston, Massachusetts.
105. Jackson, K., **Zhu, W.**, & Crosson, P. (1999). *Race and exercise/physical activity barriers*. Paper presented at the AAHPERD 1999 National Convention, Boston, Massachusetts.
106. Kang, S.-J., & **Zhu, W.** (1999). *Examination of differential item functioning of an attitude toward sports scale*. Paper presented at the AAHPERD 1999 National Convention, Boston, Massachusetts.
107. Smith, W., & **Zhu, W.** (1999). *Exercise/physical activity barriers and cardiovascular risk factors*. Paper presented at the AAHPERD 1999 National Convention, Boston, Massachusetts.

108. Smith, W., Timm, G., & **Zhu, W.** (1999). *Comparison of women's measured and predicted lung volume and body composition by Bod Pod*. Paper presented at the 1999 annual meeting of American College of Sports Medicine Annual Meeting, Seattle, Washington.
109. Timm, G., **Zhu, W.**, & Ainsworth, B. (1999). *Effects of barrier perception on exercise/physical activity participation*. Paper presented at the AAHPERD 1999 National Convention, Boston, Massachusetts.
110. Whitt, M., **Zhu, W.**, Addy, C., & Ainsworth, B. (1999). *An analysis of methods for reducing physical activity survey items*. Paper presented at the Cooper Institute Conference Series: Measurement of Physical Activity (held in conjunction with the 9th Measurement and Evaluation Symposium), Dallas, Texas.
111. **Zhu, W.** (1999). *Calibrating portfolios: Making the scores meaningful*. Paper presented at the AAHPERD 1999 National Convention, Boston, Massachusetts.
112. **Zhu, W.** (1999). *Modification and calibration of an exercise/physical activity barrier instrument using the Rasch Rating scaling model*. Paper presented at the AAHPERD 1999 National Convention, Boston, Massachusetts.
113. **Zhu, W.** (1999). *Score equivalence is at the heart of international measures of physical activity: A response to Booth's paper*. Paper presented at the Cooper Institute Conference Series: Measurement of Physical Activity (held in conjunction with the 9th Measurement and Evaluation Symposium), Dallas, Texas.
114. **Zhu, W.** (1999). *Urban women's perceived exercise/physical activity barriers: Measurement and implications*. Paper presented at the AAHPERD 1999 National Convention, Boston, Massachusetts.
115. **Zhu, W.**, & Ainsworth, B. (1999). *Validation of a classification algorithm of stage of change in an urban women population*. Paper presented at the 1999 American College of Sports Medicine Annual Meeting, Seattle, Washington.

2000

116. Chen, A., & **Zhu, W.** (April, 2000). *Re-visiting assumptions of inferential statistical analyses*. Paper presented at the annual meeting of the American Education Research Association, New Orleans, Louisiana.
117. Chen, J.-Z., Wang, R.-W., & **Zhu, W.** (June, 2000). *Chinese women's exercise barriers: A preliminary study*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, Indiana.
118. Crosson, P., **Zhu, W.**, & Timm, G. (March, 2000). *African-American women's exercise barriers: A focus-group study*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Orlando, Florida.
119. Kang, S.-J., & **Zhu, W.** (April, 2000). *A survey of Korean women's physical activity patterns*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Orlando, Florida.



120. Kulinna, P.H., Cotbran, D., & **Zhu, W.** (April, 2000). *Teachers' experiences with and perceptions of Mosston's spectrum: How do they compare with students?* Paper presented at the annual meeting of the American Education Research Association, New Orleans, Louisiana.
121. Kulinna, P.H., **Zhu, W.**, Kuntzleman, C., Richelew, J., DeJong, G., Timm, G., & Regualos, R. (March, 2000). *Evaluation of the effectiveness of a statewide curriculum using the hierarchical linear model.* Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Orlando, Florida.
122. Smith, W., Timm, G., & **Zhu, W.** (March, 2000). *Comparison of women's measured and predicted lung volume and body composition by Bod Pod.* Paper presented at the annual meeting of American College of Sports Medicine, Seattle, Washington.
123. Timm, G., **Zhu, W.**, & Ainsworth, B. (March, 2000). *No time or just an excuse?* Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Orlando, Florida.
124. Wang, R.-W., Chen, J.-Z., & **Zhu, W.** (March, 2000). *A survey of Chinese women's physical activity patterns.* Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Orlando, Florida.
125. **Zhu, W.** (March, 2000). *Calibration of the social development instruments using the Rasch model.* Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Orlando, Florida.
126. **Zhu, W.** (March, 2000). *Hierarchical linear model: A new approach for curriculum evaluation.* Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Orlando, Florida.
127. **Zhu, W.** (March, 2000). *Measurement challenges in assessing international women's physical activities.* Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Orlando, Florida.
128. **Zhu, W.** (March, 2000). *Test/item bias and DIF: A review.* Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Orlando, Florida.
129. **Zhu, W.** (August, 2000). *MIRT: What, why, how?* An invited lecture presented at Korea National University of Physical Education, Seoul, Korea.
130. **Zhu, W.**, & Kennedy, J.J. (June, 2000). *Disability measurements and public policy: Problems and possible solutions.* Paper presented at the Third International Outcomes Measurement Conference, Chicago, Illinois.
131. **Zhu, W.**, & Kennedy, J.J. (August, 2000). *Psychometric issues and challenges in measuring ADL/IADL activities of daily living.* Paper presented at the 2000 Seoul International Sport Science Congress. Seoul, Korea.
132. **Zhu, W.**, & Kennedy, J.J. (October, 2000). *Rasch calibration and analysis of functional limitation in*

*older adults*. Paper presented at the 2000 ACSM Aging Specialty Conference, Indianapolis, Indiana.

133. **Zhu, W.**, & Timm, G. (April, 2000). *A confirmatory study of Rasch-based optimal categorization of an ordinal scale*. Paper presented for at the annual meeting of the American Education Research Association, New Orleans, Louisiana.
134. **Zhu, W.**, Timm, G., Ainsworth, B., & Washburn, R. (June, 2000). *Effect of monetary incentives and follow-ups on response rate to a mail physical activity survey*. Paper presented at the annual meeting of American College of Sports Medicine. Indianapolis, Indiana.

## 2001

135. Chen, A., & **Zhu, W.** (March, 2001). *Predicting kindergartners' intuitive interest in physical activity: Searching for influences of personal, home, and school environment variables*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
136. Doyle, R., **Zhu, W.**, & Hedrick, B. (March, 2001). *A factor analysis of the construct of the barrier instrument*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
137. Engels, H.-J., & **Zhu, W.** (March, 2001). *Construction and IRT calibration of a nutrition questionnaire for the athlete*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
138. Frogley, M., **Zhu, W.**, Rimmer, J., & Creviston, T. (March, 2001). *Speaking for disabled population's lives: A focus-group approach for barrier item evaluation and generation*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
139. Kang, M., & **Zhu, W.** (March, 2001). *Validity of teacher's judgments on students' physical activity level*. Paper presented the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
140. Kang, S.J., & **Zhu, W.** (March, 2001). *An IRT evaluation of psychometric equivalence and bias of a translated physical activity questionnaire*. Paper submitted for the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
141. Kulinna, P.H., & **Zhu, W.** (March, 2001). *Linking fitness portfolios on a common scale using a Rasch model*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
142. Marquez, D., McAuley, E., & **Zhu, W.** (March, 2001). *The assessment of exercise barriers: An overview*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
143. Pongurgsorn, C., Washburn, R., & **Zhu, W.** (May, 2001). *A physical activity scale for use in Thailand: Preliminary development and evaluation*. Paper presented at the annual meeting of American College of Sports Medicine, Baltimore, Maryland.

144. Washburn, R., & **Zhu, W.** (March, 2001). *Barrier perception and physical activity participation*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
145. **Zhu, W.** (March, 2001). *Calibration of the barrier instrument using the Rasch Rating Scale model*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
146. **Zhu, W.** (March, 2001). *Calibrating portfolios to make the scores meaningful*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
147. **Zhu, W.** (May, 2001). *Comparing physical activity survey results: Challenges and possible solutions*. Paper presented at the annual meeting of American College of Sports Medicine, Baltimore, Maryland.
148. **Zhu, W.** (March, 2001). *Data resources and psychometric issues: A review* (in the symposium of "Using published activity/fitness/function data"). Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
149. **Zhu, W.** (November, 2001). *Changing field and graduate student training in USA*. Paper presented at the 2001 Guangzhou International Forum for Presidents of Universities of Higher Physical Education, Guangzhou, China.
150. **Zhu, W.** (April, 2001). *Internal and external validity of Rasch-based optimal categorization: An empirical investigation*. Paper presented at the annual meeting of the American Education Research Association, Seattle, Washington.
151. **Zhu, W.**, Ainsworth, B., & Whitt, M. (March, 2001). *Reducing the items of a physical activity questionnaire by Rasch measurement*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Cincinnati, Ohio.
152. **Zhu, W.**, Ainsworth, B., Washburn, R. (May, 2001). *Detecting item bias in a physical activity questionnaire*. Paper presented at the annual meeting of American College of Sports Medicine, Baltimore, Maryland.

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153. Hsu, S. Y., & **Zhu, W.** (April, 2002). *Intelligent data analysis using artificial neural networks*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, San Diego, California.
154. Hsu, S. Y., & **Zhu, W.**, & Frogley, M. (May, 2002). *Women wheelchair basketball players' reasons and barriers of participating in sport, exercise and physical activities*. Paper to be presented the annual meeting of American College of Sports Medicine, St. Louis, Missouri.
155. Kang, M., Frogley, M., **Zhu, W.**, & Regan, B.G. (May, 2002). *Exercise and physical activity barriers of children and youth with physical disabilities*. Paper to be presented at the annual meeting of American College of Sports Medicine, St. Louis, Missouri.

156. Liu, Y., & **Zhu, W.** (April, 2002). *Simultaneous analysis of compositional data: A review*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, San Diego, California.
157. Kang, M., **Zhu, W.**, Kurz, K., Liu, Y. (April, 2002). *Compositional data analysis of student teachers' time usage in physical education classes*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, San Diego, California.
158. Kang, M., **Zhu, W.**, & Ragan, B.G. (April, 2002). *Finding association rules among outside physical activities in elementary school children*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, San Diego, California.
159. Miyamoto, J., **Zhu, W.**, Kang, M., & Washburn, R. (May, 2002). *Accuracy of physical activity intensity classification in non-study, middle-age adults*. Paper to be presented at the annual meeting of American College of Sports Medicine, St. Louis, Missouri.
160. Ragan, B.G., **Zhu, W.**, & Liu, Y. (April, 2002). *Analysis of dietary composition of fat, protein, and carbohydrates in obese women*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, San Diego, California.
161. Regan, B.G., **Zhu, W.**, Frogley, M., & Kang, M. (May, 2002). *Evidence of construct validity for barrier perception scale*. Paper to be presented at the annual meeting of American College of Sports Medicine, St. Louis, Missouri.
162. Ragan, B.G., **Zhu, W.**, Kang, M., & Flegel, M. (April, 2002). *Construction of an ankle injury diagnostic decision tree*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, San Diego, California.
163. **Zhu, W.** (May, 2002). *Challenges and new solutions of measuring intraindividual change*. Paper to be presented at the annual meeting of American College of Sports Medicine, St. Louis, Missouri.
164. **Zhu, W.** (April, 2002). *Data mining and knowledge discovery in databases: An overview*. Paper to be presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, San Diego, California.
165. **Zhu, W.** (April, 2002). *Item reduction using the Rasch calibration information*. Paper presented at the American Educational Research Association 2002 Annual Meeting, New Orleans, Louisiana.
166. **Zhu, W.** (Sept., 2002). *Kinesmetrics: Learning and knowing by measuring*. Paper presented at the "New Century, New PE/Sport" conference, Nanjing Normal University, Nanjing, China.
167. **Zhu, W.** (Sept., 2002). *Kinesmetrics: Learning and knowing by measuring*. Paper presented at the Nanjing Institute of Physical Education, Shanghai, China.
168. **Zhu, W.** (Sept., 2002). *Kinesmetrics: Learning and knowing by measuring*. Paper presented at the Shanghai Institute of Physical Education, Shanghai, China.
169. **Zhu, W.** (Nov., 2002). *Measurement challenges in assessing physical activities*. Paper presented at the 2<sup>nd</sup> Chinese Young Scholar Conference, Jing Hai Normal Univeristy, Jing Hai, China.

170. **Zhu, W.** (Nov., 2002). *Measurement challenges in assessing physical activities*. Paper presented at Guang Zhou Institute of Physical Education, Guang Zhou, China.
171. **Zhu, W.** (Nov., 2002). *Measurement challenges in assessing physical activities*. Paper presented at Shanghai Institute of Physical Education, Guang Zhou, China.
172. **Zhu, W.**, Ainsworth, B., & Liu, Y. (April, 2002). *A comparison of urban black and white women's physical activity patterns*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, San Diego, California.
173. **Zhu, W.**, & Sun, B. (July, 2002). *Past, present, and future of children/youth physical fitness testing/education in China and USA*. Paper to be presented at the First China-US Physical Education Conference, Beijing, China.
174. **Zhu, W.**, Washburn, R., Kang, M., & Miyamoto, J. (April, 2002). *An investigation of individuals' perception on intensity of exercise and physical activity*. Paper to be presented at the annual meeting of American College of Sports Medicine, St. Louis, Missouri.
175. **Zhu, W.**, Wang, Z., Wikgren, S., & Rodriguez-Fuller, P. (July, 2002). *Information resources for K-12 physical education in China and USA*. Paper to be presented at the First China-US Physical Education Conference, Beijing, China.

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176. Gao, Y., & **Zhu, W.** (April, 2003). *The Angoff method and its extensions for setting cut-off scores*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
177. Hsu, S.Y., & **Zhu, W.** (April, 2003). *A survey of online assessments in HPERD*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
178. Hsu, S.Y., & **Zhu, W.** (April, 2003). *Challenges in setting performance standards in physical education*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
179. Kang, M., & **Zhu, W.** (April, 2003). *An experimental determination of the best missing-value recovery method in assessing physical activity using pedometers*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
180. Kang, M., & **Zhu, W.** (April, 2003). *Setting performance standards using the Bookmark procedure*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
181. Kang, M., **Zhu, W.**, & Ragan, B. (April, 2003). *On-line adaptive testing for individual assessment*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
182. Lee, M., & **Zhu, W.** (April, 2003). *Generalized examinee-centered method for determining cut-off*

- scores*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
183. Ragan, B., **Zhu, W.**, Kang, M. (April, 2003). *Developing an online pain assessment survey*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
  184. Ragan, B., **Zhu, W.**, Kang, M. (April, 2003). *Review of commonly used statistical software for multilevel analysis*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
  185. Ragan, B., **Zhu, W.**, Kang, M. (April, 2003). *Selecting and training judges for setting performance standards*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
  186. Tripp, A., **Zhu, W.**, Hsu, S.Y., & Quinn, S. (April, 2003). *A survey of teachers' assessment practice*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
  187. **Zhu, W.** (June, 2003). *Challenges and possible solutions of diary collection and analysis: A review*. Paper to be presented at the annual meeting of American College of Sports Medicine, San Francisco, CA.
  188. **Zhu, W.** (April, 2003). *Changes in setting performance standards: An overview*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
  189. **Zhu, W.** (April, 2003). *Education reforms, accountability and assessment: How are we doing in PE?* Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
  190. **Zhu, W.** (April, 2003). *Multilevel research design and data analysis: An overview*. Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
  191. **Zhu, W.** (April, 2003). *Online assessment/testing: What, why, and ho?* Paper presented at the national convention of American Alliance of Health, Physical Education, Recreation and Dance, Philadelphia, PA.
  192. **Zhu, W.** (April, 2003). *Optimal categorization construction: A Rasch view*. Paper presented at the FESTSCHRIFT in honor of Ben Wright, Chicago, IL.
- 2004
193. **Zhu, W.** (January, 2004). *Development and validation of an E-diary system for assessing physical activity and travel behaviors*. Paper presented at the Active Living Conference annual conference. Del Mar, CA.
  194. **Zhu, W.** (January, 2004). *Multilevel statistical methods for physical activity and environment/policy research*. Paper presented at the Active Living Conference annual conference. Del Mar, CA.

203. Gao, Y., Lee, M., **Zhu, W.**, Ragan, B., & Yilmaz, T. (March, 2004). *Physical activity space of blind individuals: A preliminary investigation*. Paper presented at the national convention of American Alliance of Health, Physical Education, New Orleans, LA.
204. Gao, Y., & **Zhu, W.** (March, 2004). *Score reporting in test accommodation*. Paper presented at the national convention of American Alliance of Health, Physical Education, New Orleans, LA.
205. Kang, M., Ragan, B., & **Zhu, W.** (March, 2004). *Statistical analysis of spatial behavior*. Paper presented at the national convention of American Alliance of Health, Physical Education, New Orleans, LA.
206. Lee, M., Park, C.H., **Zhu, W.**, Kang, M., & Yilmaz, T. (March, 2004). *Walking space and behaviors of older adults*. Paper presented at the national convention of American Alliance of Health, Physical Education, New Orleans, LA.
207. Lee, M., & **Zhu, W.** (March, 2004). *Decision process and models for test accommodations*. Paper presented at the national convention of American Alliance of Health, Physical Education, New Orleans, LA.
208. **Zhu, W.** (March, 2004). *Pattern analysis of missing data*. Paper presented at the national convention of American Alliance of Health, Physical Education, New Orleans, LA.
209. Lee, M., Park, C.H., **Zhu, W.**, Kang, M., & Yilmaz, T. (March, 2004). *Walking space and behaviors of older adults*. Paper presented at the national convention of American Alliance of Health, Physical Education, New Orleans, LA.
210. **Zhu, W.** (March, 2004). *Physical activity space: An overview*. Paper presented at the national convention of American Alliance of Health, Physical Education, New Orleans, LA.
211. **Zhu, W.** (March, 2004). *Principle, practice, and challenges of test accommodations*. Paper presented at the national convention of American Alliance of Health, Physical Education, New Orleans, LA.
212. Kang, M., Keylock, T., & **Zhu, W.** (June, 2004). *Experimental investigation of accuracy of energy expenditure estimation of a pedometer*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
213. Lee, M., & **Zhu, W.** (June, 2004). *ADL and chronic diseases in Chinese older adults*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
214. Ragan, B., Kang, M., Marquez, T., Bell, G.W., **Zhu, W.** (June, 2004). *Graphic pain rating scale reliability using generalizability theory*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
215. **Zhu, W.** (June, 2004). *Survey response rates of an equating pilot study*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
216. **Zhu, W.** (June, 2004). *Modern measurement theory, method and practice*. One-week lectures presented at the Porto University, Portugal.

217. **Zhu, W.** (July, 2004). *From product to process: Do we find “the egg of the chicken” by assessing physical activities?* Paper presented at 2004 Guangzhou Physical Fitness/Activity Assessment and Surveillance, Guangzhou, China.

218. **Zhu, W.** (July, 2004). *Tools for assessing physical activities: A quick overview.* Paper presented at 2004 Guangzhou Physical Fitness/Activity Assessment and Surveillance, Guangzhou, China.

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219. **Zhu, W.** (February, 2005). *Physical activity space: A new concept/measure for ecological research.* Paper presented at Active Living Research Second Annual Conference, Coronado, CA.

220. **Zhu, W.** (March, 2005). *Accuracy of speech recognition technology in diary application involving behavior data.* Paper presented at the Association of Test Publishers 2005 Conference: Innovations in Testing. Scottsdale, AZ.

221. Bascolo, M., Ragan, B., & **Zhu, W.** (April, 2005). *Which reliability: Instrument or behavior?* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.

222. Gao, Y., & **Zhu, W.** (April, 2005). *Issues of MET scoring in obesity.* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.

223. Kang, M., & **Zhu, W.**, & Ragan, B. (April, 2005). *Time-series analysis of physical activity data.* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.

224. Lee, M., Zhu, W., & Ulrich, D.A. (April, 2005). *Many-faceted Rasch calibration of TGMD-2.* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.

225. Lee, M., & **Zhu, W.** (April, 2005). *MET values and individuals with disabilities.* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.

226. Park, J.H., Kang, M., & **Zhu, W.** (April, 2005). *Which validity evidence?* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.

227. Park, Y., & **Zhu, W.** (April, 2005). *Which correlation coefficient?* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.

228. Shin, S., Do, K., & **Zhu, W.** (April, 2005). *Which criterion measure?* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.

229. **Zhu, W.** (April, 2005). *Data quality control in clinical trials.* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.

230. **Zhu, W.** (April, 2005). *MET values and aging population.* Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.



231. **Zhu, W.** (April, 2005). *Psychometric issues in assessment of attitudes toward individuals with disabilities*. Paper presented at the national convention of American Alliance of Health, Physical Education, Chicago, IL.
232. Gao, Y., Boscolo, M., Krahling, H., **Zhu, W.**, & Lee, M. (April, 2005). *Step-count accuracy and instrument equivalence of McDonalds' stepometers*. Paper presented at the annual meeting of American College of Sports Medicine, Nashville, Tennessee.
233. Kang, M., **Zhu, W.**, & Kang, S.J. (June, 2005). *Cognitive related characteristics of children's physical activity recall*. Paper presented at the annual meeting of American College of Sports Medicine, Nashville, Tennessee.
234. Lee, M., **Zhu, W.**, Gao, Y., Hedrick, B., Crawford, J., Gilbert, M., Frogley, M., & Morse, M. (June, 2005). *Preliminary validity evidence of a trunk push-up test for individuals with spinal cord injury*. Paper presented at the annual meeting of American College of Sports Medicine, Nashville, Tennessee.
235. Yang, L., Park, Y., & **Zhu, W.** (June, 2005). *CDC obesity standards: Norm-referenced or criterion-referenced?* Paper presented at the annual meeting of American College of Sports Medicine, Nashville, Tennessee.
236. **Zhu, W.** (June, 2005). *E-diary for assessing physical activity: Development and validation*. Paper presented at the annual meeting of American College of Sports Medicine, Nashville, Tennessee.
237. Brower, D.G., Lee, M., Kim, M., & **Zhu, W.** (October, 2005). *A validation study of talking pedometers for blind and visually impaired individuals*. Paper presented at the Walking for Health: Measurement and Research Issues and Challenges (ACSM-UIUC Kinesmetrics Symposium Series), Champaign/Urbana, Illinois.
238. Chun, H.J., Lee, M., & **Zhu, W.** (October, 2005). *A validation study of Armband device for measuring energy expenditure in wheelchair athletes*. Paper to be presented at the Walking for Health: Measurement and Research Issues and Challenges (ACSM-UIUC Kinesmetrics Symposium Series), Champaign/Urbana, Illinois.
239. Lee, M., Kim, M., Boscolo, M., Kalck, K., Bendis, K., & **Zhu, W.** (October, 2005). *Position invariance of Omron-BI pedometers: A preliminary study*. Paper presented at the Walking for Health: Measurement and Research Issues and Challenges (ACSM-UIUC Kinesmetrics Symposium Series), Champaign/Urbana, Illinois.
240. Park, Y., Gao, Y., & **Zhu, W.** (October, 2005). *Accuracy of Armband in measuring walking steps. Paper to be presented at the Walking for Health: Measurement and Research Issues and Challenges (ACSM-UIUC Kinesmetrics Symposium Series), Champaign/Urbana, Illinois.*
241. Yang, L., Park, Y., Gao, Y., & **Zhu, W.** (October, 2005). *Impact of daily variation and measurement device on estimating walking behavior: A generalizability study*. Paper presented at the Walking for Health: Measurement and Research Issues and Challenges (ACSM-UIUC Kinesmetrics Symposium Series), Champaign/Urbana, Illinois.
242. **Zhu, W.**, & Marti, J. (October, 2005). *Measuring and modeling physical activity spatial behavior. Paper presented at the Walking for Health: Measurement and Research Issues and Challenges*

(ACSM-UIUC Kinesmetrics Symposium Series), Champaign/Urbana, Illinois.

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243. **Zhu, W.**, Hasegawa-Johnson, M., Gao, Y., Kantor, A., Chandrasekhar, D., Park, Y., & Lin, B. (February, 2006). *Validation of an E-diary system for assessing physical activity: A preliminary report*. Paper presented at Active Living Research Third Annual Conference, Coronado, CA.
244. Lee, M., & **Zhu, W.** (April, 2006). *Large variability in adapted physical activity research*. Paper presented at the national convention of American Alliance of Health, Physical Education, Salt Lake City, UT.
245. Lee, M., **Zhu, W.**, Yang, L., Gao, Y., Hedrick, B., Frogley, M., & Gilbert, M. (April, 2006). *Physical and psychological profiles of wheelchair athletes*. Paper presented at the national convention of American Alliance of Health, Physical Education, Salt Lake City, UT.
246. Lin, Y., Lee, M., **Zhu, W.**, Kalck, K., & Bendis, K. (April, 2006). *Impact of obesity on accuracy of Omron-BI pedometers*. Paper presented at the International Congress on Physical Activity and Public Health, Atlanta, GA.
247. **Zhu, W.** (April, 2006). *Constructing a task bank for standard assessment using item response theory*. Paper presented at the national convention of American Alliance of Health, Physical Education, Salt Lake City, UT.
248. **Zhu, W.** (April, 2006). *Designing studies and analyzing data with small n*. Paper presented at the national convention of American Alliance of Health, Physical Education, Salt Lake City, UT.
249. **Zhu, W.** (April, 2006). *Evidence-centered assessment design: Principle and practice*. Paper presented at the national convention of American Alliance of Health, Physical Education, Salt Lake City, UT.
250. **Zhu, W.**, & Kim, M. (April, 2006). *Analyzing Liker scale data using item response theory unfolding model*. Paper presented at the national convention of American Alliance of Health, Physical Education, Salt Lake City, UT.
251. **Zhu, W.** (April, 2006). *Problems, challenges and possible solutions in disability measurement research and practice*. Paper presented at the Adapted Physical Education Workshop (sponsored by the Department of Education, Oregon State University and University of Utah), Salt Lake City, UT, 2006.
252. Boscolo, M., **Zhu, W.**, & Lee, M. (May, 2006). *Too accurate to become "reliable?"* Paper to be presented at the annual meeting of American College of Sports Medicine, Denver, CO.
253. Jae, S., Heffernan, K. S., Lee, M., Mojtahedi, M. C., Evans, E. C., **Zhu, W.**, & Fernhall, B. (May, 2006). *Effects of acute isometric exercise on arterial stiffness in persons with paraplegia*. Paper presented at the annual meeting of American College of Sports Medicine, Denver, CO.
254. Lee, M., Kim, M., & **Zhu, W.** (May, 2006). *Position invariance of Omron-BI pedometers in free-living: A preliminary study*. Paper presented at the annual meeting of American College of Sports Medicine, Denver, CO.

255. Shin, S., **Zhu, W.**, & Lee, M. (May, 2006). *Assessing energy expenditure using LifeShirt: A case study*. Paper presented at the annual meeting of American College of Sports Medicine, Denver, CO.
256. **Zhu, W.** (May, 2006). *Qi-gong for stress management*. Paper presented at the 1st Annual Conference for Optimizing & Revitalizing the Role of the Preceptor, Oak Brook, IL.
257. **Zhu, W.** (May, 2006). *Problems, challenges and possible technology solutions in assessing physical activity of individuals with disabilities*. Paper presented at the conference of Exercise and Recreational Technologies for People with Disabilities: State of the Science, Denver, CO.
258. **Zhu, W.** (September, 2006). *Assessing Kinesiology students' learning in higher education*. Paper presented at the 76 Annual Meeting of the American Academy of Kinesiology and Physical Education, Tuscon, AZ.
259. Graber, K.C., Erwin, H., Woods, A.M., & **Zhu, W.** (October, 2006). *Here's looking at you again PETE: Profiling the present*. Paper presented at 2006 NASPE Conference on Physical Education Teacher Education "Directions for the 21<sup>st</sup> Century," Long Beach, CA.
260. Lee, M. & **Zhu, W.** (October, 2006). *Individual calibration for estimating energy expenditure in wheelchair athletes*. Paper presented at the 8<sup>th</sup> North American Federation of Adapted Physical Activity Symposium, Ann Arbor, MI.
261. **Zhu, W.** (October, 2006). *Thoughts on China's physical education and sports after 2008*. Guest lecture presented at the Shanghai Institute of Physical Education, Shanghai, China.
262. **Zhu, W.** (October, 2006). *School PE and sports reform: A global view*. Paper presented at the conference of School Physical Education Reform, Nanjing, China.
263. **Zhu, W.** (October, 2006). *Thoughts on China's physical education and sports after 2008*. Guest lecture presented at the Nanjing Normal University, Nanjing, China.
264. **Zhu, W.** (October, 2006). *Thoughts on China's physical education and sports after 2008*. Guest lecture presented at the Wuhan Institute of Physical Education, Wuhan, China.
265. **Zhu, W.** (October, 2006). *Graduate student training in the information era*. Paper presented at the First Doctoral Forum on Beijing 2008: Challenges and Opportunities, China Sports Science Society, Wuhan, China.
266. **Zhu, W.** (October, 2006). *Thoughts on China's physical education and sports after 2008*. Guest lecture presented at the Guang Zhou Institute of Physical Education, Guang Zhou, China.
267. **Zhu, W.** (October, 2006). *School PE and sports reform: A global view*. Guest lecture presented at the Guang Zhou Institute of Physical Education, Guang Zhou, China.
268. **Zhu, W.**, Shen, X., Li, X., Gao, Y., & Yang, L. (October, 2006). *Guo-Lin qi-gong exercise for cancer survivorship: A review*. Paper presented at the conference of Cancer Survivorship: Embracing the future, North Bethesda, MD.

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269. Zhu, W., Gao, Y., Park, Y., & Yang, L. (February, 2007). *Tracking and understanding walking space: A preliminary report*. Paper presented at Active Living Research 4th Annual Conference, Coronado, CA
270. Boscolo, M.S., & **Zhu, W.** (March, 2007). *Personal digital assistant platform for computerized adaptive testing of function assessment*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.
271. Gao, Y., & **Zhu, W.** (March, 2007). *Potentia* Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Ft. Worth, TX.
272. *Application of generalized estimating equation method in physical activity research: A tutorial*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.
273. Lee, M., & **Zhu, W.** (March, 2007). *Computerized adaptive testing for disability research and public service*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.
274. Lee, M., & **Zhu, W.** (March, 2007). *Status and issues in assessing physical activities of persons with spinal cord injury: A review*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.
275. Park, Y., & **Zhu, W.** (March, 2007). *Social network analysis for studying complex social network phenomena*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.
276. Park, Y., **Zhu, W.**, Gao, Y. (March, 2007). *Coder agreement in scoring physical activity diary data using the compendium*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.
277. **Zhu, W.** (March, 2007). *IRT (item response theory), 20 years later: Promises made, not made and to be made*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.
278. **Zhu, W.** (March, 2007). *Principle and practice of computerized adaptive testing: An overview*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.
279. **Zhu, W.**, Gao, Y., Park, Y., Yang, L., & Chandrasekhar, D. (March, 2007). *Development and validation of a walking space measure*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.
280. **Zhu, W.**, & Lee, M. (March, 2007). *Agent-based modeling of environmental impact on physical activities*. Paper presented at the national convention of American Alliance of Health, Physical Education, Baltimore, MD.

281. Castelli, D.M., Graber, K.C., Erwin, H., **Zhu, W.**, & Woods, M. (April, 2007). *A national profile of teacher education faculty: The Construction of an online survey*. Paper presented at the 2007 American Educational Research Association annual meeting, Chicago, IL
282. **Zhu, W.** (April, 2007). *Promoting physical activity through internet: A persuasive technology view*. Paper presented at the Persuasive 2007: the Second International Conference on Persuasive Technology. Stanford University, Palo Alto, CA.
283. Gao, Y., & **Zhu, W.** (May, 2007). *Walking tests to predict VO<sub>2</sub>max: A review*. Paper presented at the annual meeting of American College of Sports Medicine, New Orleans, LA.
284. Jae, S.Y., Heffernan, K.S., Lee, M., Fahs, C.A., **Zhu, W.**, Fernhall, B. (May, 2007). *Carotid artery stiffness and aortic augmentation index in physically active persons with spinal cord injury*. Paper presented at the annual meeting of American College of Sports Medicine, New Orleans, LA.
285. Lee, M., **Zhu, W.**, Yang, L., Bendis, K., & Hernandez, J. (May, 2007). *Position invariance of Omron-BI pedometers in older adults*. Paper presented at the annual meeting of American College of Sports Medicine, New Orleans, LA.
286. **Zhu, W.**, Hasegawa-Johnson, M., Kantor, A., Roth, D., Gao, Y., Park, Y., & Yang, L. (May, 2007). *E-coder for automatic scoring physical activity diary data: Development and validation*. Paper presented at the annual meeting of American College of Sports Medicine, New Orleans, LA.
287. **Zhu, W.** (June, 2007). *Theory and method for obesity epidemic modeling*. Paper presented at the National Fitness Symposium. Guang Zhou Institute of Physical Education. Guang Zhou, China.
288. **Zhu, W.** (Oct., 2007). *Critical measurement issues in dose-response research*. Paper presented at the Cooper Institute conference series: Diversity in Physical Activity and Health: Measurement and Research Issues and Challenges. The Cooper Institute, TX.
289. **Zhu, W.** (Nov., 2007). *Thoughts on scientific research on Guo Lin Qi-gong*. Paper presented at the 2007 Shanghai Guo Lin Qi-gong Symposium. Shanghai Club of Cancer Recovery, Shanghai, China.
290. **Zhu, W.** (Nov., 2007). *Modern exercise vs. Guo Lin Qi-gong in cancer care and survivorship: Lessons learned and future directions*. Paper presented at the Shanghai 10<sup>th</sup> International Symposium on Qigong, Shanghai, China.
291. **Zhu, W.** (Dec., 2007). *IRT (item response theory): 20 year's journey in the field of Kinesiology*. Paper presented at the Charles University, the Czech Republic.
292. **Zhu, W.** (Dec., 2007). *Research and publication in Kinesmetrics*. Paper presented at the Charles University, the Czech Republic.
293. **Zhu, W.** (Dec., 2007). *Current measurement issues and future trends in physical activity assessment*. Paper presented at the University of Masaryk, the Czech Republic.

294. Gao, Y., & **Zhu, W.** (April, 2008). *Meeting physical activity recommendation or not: Depends on the method.* Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance, Ft. Worth, TX.
295. Graber, K.C., Erwin, H.E., Woods, A. M., Rhoades, J., & **Zhu, W.** (April, 2008). *Demographic characteristics of physical education teacher educators by Carnegie Classification.* Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance, Ft. Worth, TX.
296. Lee, M., **Zhu, W.**, Brower, D., McMurray, B., Holbrook, E.A., & Gunderson, J. (April, 2008). *Perceived physical activity barrier of blind or visually impaired individuals.* Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance, Ft. Worth, TX.
297. Lee, M., **Zhu, W.**, Fernhall, B., & Hedrick, B. (April, 2008). *Physical activity compendium supplement for persons with disabilities.* Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance, Ft. Worth, TX.
298. Placek, J., Rink, J. E., Graber, K., **Zhu, W.**, Fox, C., & Dyson, B. (April, 2008). *Introducing the elementary physical education assessment series.* Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Ft. Worth, TX.
299. **Zhu, W.** (April, 2008). *Future of physical fitness testing.* Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance, Ft. Worth, TX.
300. **Zhu, W.** (April, 2008). *Dose-response issues in physical activity research.* Paper presented at the business meeting of the Measurement & Evaluation Council, American Alliance for Health, Physical Education, Recreation and Dance, Ft. Worth, TX.
301. Lee, M., & **Zhu, W.** (May, 2008). *Physical activity participation of persons who are blind and visually impaired.* Paper presented at the RRTC State of the Science Conference on Health, Wellness and Disability. Rehabilitation Research & Training Center (RRTC), Oregon Health & Science University.
302. Nandkumar, R., **Zhu, W.**, Bajcsy, P., Krahling, H., Datta, A., Ceasar, J., Sunderlin, J., Jackson, V., & Sproat, J. (May, 2008). *The web in BMI surveillance.* Paper presented at Illinois Child Health Examination Surveillance System (CHESS) Summit, Chicago, IL.
303. Boscolo, M. S., **Zhu, W.**, Burgener, S., & Zeiders, R. (May, 2008). *Qi gong for older adults with lower extremity osteoarthritis: A pilot study.* Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
304. Gao, Y., & **Zhu, W.** (May, 2008). *DIF detection of activity items across Non-Hispanic Whites and Hispanics in NHANES physical activity questionnaire.* Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.

305. Lee, M., **Zhu, W.**, Fernhall, B., & Hedrick, B. (May, 2008). *Estimating MET values of persons with SCI using heart rate*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
306. Li, S., **Zhu, W.**, Park, S.-H., & Lin, J. (May, 2008). *Monitoring glucose and physical activity using mobile phone: A proposed system*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
307. Park, Y. & **Zhu, W.** (May, 2008). *Finding physical activity pattern using cluster analysis*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
308. **Zhu, W.** (May, 2008). *Persuasive technology for physical activity promotion*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
309. **Zhu, W.**, Nedovic-Budic, Z., Olshansky, R., Gao, Y., Park, Y., Chandrasekhar, D., McAuley, E., Chodzko-Zajko, W., & Marti, J. (2008). *Neighborhood characteristics and older adults' walking behavior: A preliminary report*. Paper presented at the annual meeting of American College of Sports Medicine, Indianapolis, IN.
310. **Zhu, W.** (August, 2008). *A primer-test centered equating method for cut-off score setting*. Paper presented at the 2008 International Convention on Science, Education and Medicine in Sport (ICSEMIS), Guangzhou, China.
311. **Zhu, W.** (August, 2008). *Assessing and promoting health-related physical fitness and physical activity in school children*. Paper presented at the 2008 International Convention on Science, Education and Medicine in Sport (ICSEMIS), Guangzhou, China.
312. **Zhu, W.** (August, 2008). *Measurement and evaluation of youth athletic performance-related fitness: A review*. Paper presented at the 2008 International Convention on Science, Education and Medicine in Sport (ICSEMIS), Guangzhou, China.
313. **Zhu, W.** (October, 2008). *Persuasive technology for behavior change and health promotion*. Paper presented at Ci08 Club Industry: The Conference and Exposition for Health & Fitness Facility Management, Chicago, IL.
314. **Zhu, W.** (November, 2008). *Assessing children's physical fitness*. Paper presented at the Nanjing Normal University, Nanjing, China.
315. **Zhu, W.** (November, 2008). *"A" in grade or "A" in ability? – Thoughts on interdisciplinary training in Kinesiology*. Paper presented at the Interdisciplinary and Creative Arts Education Summit, The Hong Kong Institute of Education, Hong Kong.
316. **Zhu, W.** (November, 2008). *Guo Lin qi-gong and cancer care*. Paper presented at the Shanghai Cancer Recovery School, Shanghai, China.

317. **Zhu, W.** (November, 2008). *Promoting health lifestyle using social ecological model*. Paper presented at the Nanjing University of Agriculture, Nanjing, China.
318. **Zhu, W.** (November, 2008). *Promoting physical activities using technology*. Paper presented at the u-Health Care International Symposium, Seoul, Korea.
319. **Zhu, W.** (November, 2008). *Qi-gong for stress management and cancer care*. Paper presented at the Korea Institute of Oriental Medicine, Daejeon, Korea.
320. **Zhu, W.** (November, 2008). *Training and assessment in Kinesiology in the U.S.* Paper presented at the Nanjing Institute of Physical Education, Nanjing, China.
321. **Zhu, W.** (November, 2008). *Walking for health research: The present and the future*. Paper presented at the 2<sup>nd</sup> Shanghai International Forum on Exercise and Health, Shanghai, China.

2009

322. Avery, M., Dyson, B., Fisette, J., Fox, C., Franck, M., Graber, K., Placek, J., Rink, J., Williams, L., & **Zhu, W.** (April, 2009). Assessing national standards: Secondary standard 1 and K-12 standards 2-6. Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Tampa, FL.
323. Gao, Y., & **Zhu, W.** (April, 2009). Differential item functioning analysis of physical activity disparities in the USA. Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Tampa, FL.
324. Lee, M., Boscolo, M., **Zhu, W.**, & Pitchford, E.A. (April, 2009). Interactive game technology: Make behavior change fun! Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Tampa, FL.
325. Park, S-H., & **Zhu, W.** (April, 2009). Remote physical activity intervention using sensor, wireless, and internet technologies. Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Tampa, FL.
326. Park, Y., **Zhu, W.**, & Ulrich, D.A. (April, 2009). Finding unexpected response patterns in TGMD-2 using social network analysis. Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Tampa, FL.
327. Placek, J., Fox, C., **Zhu, W.**, Graber, Fisette, J.L., Avery, M., Franck, M., Dyson, B., Park, Y. (April, 2009). PE Metrics Standard 1, Elementary: Development of an assessment item/task bank. Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Tampa, FL.
328. Youm, S-K., Park, S-H., **Zhu, W.** (April, 2009). Tracking health behaviors using radio frequency identification technology. Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Tampa, FL.



329. **Zhu, W.** (March, 2009). Assessing and promoting health-related physical fitness and activity in school children. Paper presented at the Zhejiang Normal University. Jinhua, China.
330. **Zhu, W.** (March, 2009). Libraries at UIUC. Presentation at the Shanghai University of Sport, Shanghai, China.
331. **Zhu, W.** (March, 2009). Physical activity and cancer prevention and treatment. Paper presented at the Shanghai Cancer Recovery School, Shanghai, China.
332. **Zhu, W.** (March, 2009). Thoughts on research in Chinese Wu Su (martial arts). Paper presented at the Shanghai University of Sport, Shanghai, China.
333. **Zhu, W.** (March, 2009). Walking for health. Paper presented at the Zhejiang University of Technology, Hangzhou, China.
334. **Zhu, W.** (April, 2009). Dyadic analysis: An introduction. Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Tampa, FL.
335. **Zhu, W.** (April, 2009). Persuasive technology: What, why, and how? Presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Tampa, FL.
336. **Zhu, W.** (May, 2009). Birth, growth, and challenges of “Kinesmetrics” in the USA. Paper presented at the First International Forum of Kinesometrics. University of Primorska, Slovenia.
337. Shin, S., Nam, D.H., Kang, S.K., Park, S.H., **Zhu, W.** (May, 2009). Effects of stepping pattern and speed on energy expenditure. Paper presented at the annual meeting of American College of Sports Medicine, Seattle, Washington.
338. Wang, R., **Zhu, W.**, Yuan, Z., Lu, H., Li, Q., Gao, Y., Fan, L., Wang, J., Rowland, K.M., Courneya, K.S., & Schneider, C. (May, 2009). Effects of long-term Guo Lin Qi-gong practice on cancer survivors’ quality of life and aerobic capacity: A preliminary report. Paper presented at the annual meeting of American College of Sports Medicine, Seattle, Washington.
339. Yong, G., & **Zhu, W.** (May, 2009). Identifying culturally sensitive physical activities using DIF analysis. Paper presented at the annual meeting of American College of Sports Medicine, Seattle, Washington.
340. **Zhu, W.**, Wang, R., Yuan, Z., Lu, H., Fan, L., Gao, Y., L, Q., Wang, J., Rowland, K.M., Courneya, K.S., & Schneider, C. (May, 2009). Energy expenditure characteristics of Guo Lin Qi-gong exercise in cancer survivors: A preliminary report. Paper presented at the annual meeting of American College of Sports Medicine, Seattle, Washington.
341. **Zhu, W.** (July, 2009). Guo Lin qigong for cancer care: Past, present and future. Paper presented at the International Tai Chi Chuan Symposium, Wanderbilt University, Nashville, TN.

342. **Zhu, W.** (August, 2009). Walking and health: Past, present, future. Paper presented at the Tianjing University of Sport, Tianjing, China.
343. **Zhu, W.** (August, 2009). Assessing physical activity and energy expenditure: From sensors to real life. Paper presented at the Jilin University, Chang Chun, China.
344. **Zhu, W.** (August, 2009). How to get your research published in a refereed (SCI or SCII) journal (in English)? Paper presented at the Beijing University of Sports, Beijing, China.
345. **Zhu, W.** (August, 2009). How to get your research published in a refereed (SCI or SCII) journal (in English)? Paper presented at the National Sport Research Institute, Beijing, China.
346. **Zhu, W.** (August, 2009). Walking and health: Past, present, future. Paper presented at the Scientific Congress on Sport for All. Beijing, China.
347. **Zhu, W.** (August, 2009). “Kinesmetrics” in USA: Past, present, future. Paper presented at the conference of “Measurement in Human Movement: East vs. West. Seoul Olympic Parktel, Korea.
348. **Zhu, W.** (September, 2009). Environment, walking and health: An evolutionary, social-ecological view. Paper presented at the International Exercise Science Symposium, Nanjing Normal University, Nanjing, China.
349. **Zhu, W.** (September, 2009). Environment, walking and health: An evolutionary, social-ecological view. Paper presented at the International Exercise Science Lecture Series, Nantong University, Nantong, China.
350. **Zhu, W.** (September, 2009). Environment, walking and health: An evolutionary, social-ecological view. Paper presented at the International Symposium on Walking and Health: Theory and Practice. Shanghai Administration of Sports, Shanghai, China.
351. **Zhu, W.** (Nov., 2009). Objective measurement of physical activities: A state-of-the-art review. Paper presented at the Guangzhou University of Sport, Guangzhou, China.
352. **Zhu, W.** (Nov., 2009). Objective measurement of physical activities: A state-of-the-art review. Paper presented at the International Forum on Prospect of Exercise and Health, Nanjing, China.
353. **Zhu, W.** (Nov., 2009). Objective measurement of physical activities: A state-of-the-art review. Paper presented at the 3<sup>rd</sup> Shanghai International Forum on Exercise and Health, Shanghai University of Sport, Shanghai, China.
354. **Zhu, W.** (Dec., 2009). Dose-response issues and challenges in physical activity and health research. In *Proceedings of 2009 Shanghai International Forum on Sports Medicine and Sports Science* (p. 21-23). Shanghai, China.

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355. **Zhu, W.** (January, 2010). *Measurement and evaluation of children and youth fitness: Past, present and future*. Paper presented at “CHEO Research Rounds,” Research Institute, Children’s Hospital of Eastern Ontario, Canada.

356. Avery, M., Dyson, B.P., Fiset, J.L., Fox, C., Franck, M., Graber, K., Placek, J., Rink, J.E., Williams, L., **Zhu, W.** (March, 2010). *Introducing PE Metrics standards 1-6 elementary and PE Metrics online*. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), Indianapolis, IN.
357. Baumgartner, T.A., Clark, J.E., Kang, M., Reeve, T.G., **Zhu, W.**, Rikli, R., & Thomas, J. (March, 2010). *Measurement and research training in the 21<sup>st</sup> century*. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), Indianapolis, IN.
358. Brown, D.R., Rimmer, J.H., **Zhu, W.**, & Gao, Y. (March, 2010). *Physical activity and health disparities: Measurement and implications*. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), Indianapolis, IN.
359. Guan, S., & **Zhu, W.** (March, 2010). *Construct validity evidence of common physical activity measures: A meta-analysis*. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), Indianapolis, IN.
360. Khosravinasr, S., & **Zhu, W.** (March, 2010). *Cell phone for tracking physical activity space: A case study*. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), Indianapolis, IN.
361. Teo, E.W., **Zhu, W.**, & Guan, S. (March, 2010). *Data characteristics of common health, fitness, and physical activity measures*. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), Indianapolis, IN.
362. **Zhu, W.** (March, 2010). *Sadly, the earth is still around “ $p < .05$ ”*. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), Indianapolis, IN.
363. **Zhu, W.**, Youm, S.-K., & Philip, L. (March, 2010). *Assessing physical fitness and activity using RFID*. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), Indianapolis, IN.
364. Wang, R., **Zhu, W.**, Wang, J., Fan, L., Li, Q., Yuan, Z., & Lu, H. (April, 2010). Effect of long-term Guo Lin qigong practice on quality of life and health. Paper presented at the Congress of Chinese Treatment and Rehabilitation. Beijing, China.
365. **Zhu, W.** (April, 2010). A scientific look at the role of Guo Lin Qi-gong in cancer survivorship and care. Paper presented at the Congress of Chinese Treatment and Rehabilitation. Beijing, China.
366. **Zhu, W.** (April, 2010). Physical activity and health: New research direction in Kinesiology. Paper presented at the Nanjing Normal University, Nanjing, China.

367. **Zhu, W.** (April, 2010). “ $p < .05$ ” abuse, consequences and alternatives. Paper presented at the Capital Institute of Physical Education, Beijing, China.
368. **Zhu, W.** (April, 2010). Physical activity and public health. Paper presented at the Capital Normal Institute, Beijing, China.
369. **Zhu, W.** (April, 2010). Physical activity and health: New research direction. Paper presented at the South China Normal University, Guangzhou, China.
370. Teo, E.W., & **Zhu, W.** (May, 2010). Fitness level and obesity rate among indigenous children of Semelai tribe, Malaysia. Paper presented at 2010 American College of Sports Medicine 57<sup>th</sup> Annual Meeting, Baltimore, Maryland.
371. Wang, J., & **Zhu, W.** (May, 2010). Effects of Resistance training on resting blood pressure: A meta-analysis of randomized controlled trials. Paper presented at 2010 American College of Sports Medicine 57<sup>th</sup> Annual Meeting, Baltimore, Maryland.
372. Wang, R., **Zhu, W.**, Yuan, Z., McAuley, E., Fan, L., Lu, H., & Zhou, P. (May, 2010). Social support for physical activity in cancer survivorship: A survey study. Paper presented at 2010 American College of Sports Medicine 57<sup>th</sup> Annual Meeting, Baltimore, Maryland.
373. Yu, H., Chen, X., & **Zhu, W.** (May, 2010). Characteristics of endurance load of a successful training program for Chinese top speed skaters. Paper presented at 2010 American College of Sports Medicine 57<sup>th</sup> Annual Meeting, Baltimore, Maryland.
374. **Zhu, W.**, Wang, R., Yuan, Z., Fan, L., Lu, H., & Zhou, P. (May, 2010). Gou-lin Qi-gong exercise for cancer care practice: a Preliminary Report. Paper presented at 2010 American College of Sports Medicine 57<sup>th</sup> Annual Meeting, Baltimore, Maryland.
375. **Zhu, W.** (Sept., 2010). How to get your research published in a refereed (SCI or SCII) journal (in English)? Paper presented at Masaryk University, Czech Republic.
376. **Zhu, W.** (Sept., 2010). Measurement and evaluation of physical fitness in USA. Paper presented at Masaryk University, Czech Republic.
377. **Zhu, W.** (Sept., 2010). Measurement of physical activities: A state-of-the-art review. Paper presented at Masaryk University, Czech Republic.
378. Datta, A., & **Zhu, W.** (Oct., 2010). Cooper Internatinal Youth Fitness Test. Paper presented at the 2010 Nanjing Interantional Conference on Youth Fitness and Health, Nanjing, China.
379. **Zhu, W.** (Oct., 2010). Youth fitness evaluation: Norm-reference vs. criterion reference. Paper presented at the 2010 Nanjing Interantional Conference on Youth Fitness and Health, Nanjing, China.
380. **Zhu, W.** (Oct. 2010). Physical activity and health. Paper presented at the Tong Ji University, Shanghai, China.

381. **Zhu, W.** (Oct. 2010). Physical activity and health. Paper presented at the Su Zhou University, Su Zhou, China.
382. **Zhu, W.** (Nov., 2010). Energy imbalance: From labor saving to sedentary behaviors. Paper presented at the Beijing University of Sports, Beijing, China.
383. **Zhu, W.** (Nov., 2010). Youth fitness evaluation: from Norm-reference to criterion reference. Paper presented at the 2010 International Forum on Sport Science, Shandong University, Jinan, China.
384. **Zhu, W.** (Nov., 2010). Promoting physical activities using technology. Paper presented at the 4<sup>th</sup> Shanghai International Forum on Exercise and Health, Shanghai University of Sports, Shanghai, China.

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385. Boiarskaia, E., Das, B., **Zhu, W.**, Welk, G., & Meredith, M. (March, 2011). Physical education teacher responses to mandatory FITNESSGRAM testing in Texas. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), San Diego, CA.
386. Wang, R., & **Zhu, W.** (2011). Meta-regression for dose-response research. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), San Diego, CA.
387. **Zhu, W.** (March, 2011). Dose-response issues and challenges in physical activity research. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), San Diego, CA.
388. **Zhu, W.** (March, 2011). Approaches for development of criterion-referenced standards in youth. Paper presented at the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHEPRD), San Diego, CA.
389. **Zhu, W.** (April, 2011). New approaches to setting standards in Kinesmetrics: Problems, solutions, and future directions. Paper presented at the Fifth Annual Margaret Jo Safrit Lecture in Kinesiology, University of Wisconsin-Madison, Madison, WI.
390. Li, Q., **Zhu, W.**, Li, M., & Tan, J. (May, 2011). Perceived barriers to exercise and physical activity among persons with diabetes. Paper presented at 2011 American College of Sports Medicine 58<sup>th</sup> Annual Meeting, Denver, CO.
391. Teo, E. W., Zhu, W., & Ulrich, D. (May, 2011). Development of short-TGMD-2 using Rasch item-reduction approach. Paper presented at 2011 American College of Sports Medicine 58<sup>th</sup> Annual Meeting, Denver, CO.
392. **Zhu, W.**, & Boiarskaia, E. (May, 2011). Assessing physical function using CAT: A measurement utility study. Paper presented at 2011 American College of Sports Medicine 58<sup>th</sup> Annual Meeting, Denver, CO.

393. **Zhu, W.** (July, 2011). Sedentary behavior and health: An integrated East and West ecological/evolutionary view. Paper presented at the 22th Pan-Asian Congress of Sports & Physical Education, Tsinghua University, Beijing, China.
394. **Zhu, W.** (Sept., 2011). Setting standards in youth fitness testing: Problems, solutions, and future directions. Paper presented at the 6<sup>th</sup> International Scientific Conference on Kinesiology: Integrative power of Kinesiology. Opatija, Croatia.
395. **Zhu, W.** (Oct., 2011). Kinesiology research in USA. Paper presented at the 2011 National Key Laboratory Workshop of Sports Rehabilitation & Strength Conditioning, Shanghai Institute of Sport Research, Shanghai, China.
396. **Zhu, W.** (Oct., 2011). Labor saving: Have we gone too far? Paper presented at the International Symposium on Cycling and Health. Shanghai Administration of Sports, Shanghai, China.
397. **Zhu, W.** (Nov., 2011). Critical measurement challenges and issues in Tai Chi and Qi Gong research. Paper presented at the 5<sup>th</sup> Asia-Pacific Conference on Exercise and Sports Science (ACCESS). Shanghai University of Sport, Shanghai, China.
398. **Zhu, W.** (Nov., 2011). Critical kinesmetric issues in sedentary behavior and health research. Paper presented at the 8<sup>th</sup> International Conference: Sport & Quality of Life 2011. Brno, Czech Republic.
399. **Zhu, W.** (Nov., 2011). Guo Lin Qigong for cancer care and survivorship: Some preliminary reports. Paper presented at the 11<sup>th</sup> International Scientific Symposium of Qi-gong. Qigong Institute of Shanghai University of Traditional Chinese Medicine, Shanghai, China.
400. **Zhu, W.** (Dec., 2011). How to publish body-mind research articles (in English) at SCI Journals. Lecture presented at the preconference of the Tai Chi and Health Research: Past, Present and Future, the first China-ASEAN Wushu development forum. Nanning, Guangxi, China.
401. **Zhu, W.** (Dec., 2011). Tai Chi research: What we have learned and what we have missed? Paper presented at the preconference of the Tai Chi and Health Research: Past, Present and Future, the first China-ASEAN Wushu development forum. Nanning, Guangxi, China.

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402. **Zhu, W.** (March, 2012). New technology & mobile phone: Opportunities and challenges. Paper presented at the 12<sup>th</sup> Measurement & Evaluation Symposium “New Approaches in Assessing Physical Activity,” Boston, MA.

403. **Zhu, W.** (March, 2012). How can new technology and mobile phone help new physical education? Paper presented at the Suzhou University, China.
404. **Zhu, W.** (March, 2012). From “March Madness” to “Exercise Medicine:” A quick look at the US sports and thoughts on the sports in China. Paper presented at the Xuzhou University, China.
405. **Zhu, W.** (April, 2012). New methods and tech that may significantly improve research/practice in physical education. Paper presented at the 2012 AERA SIG Invisible College Meeting in Vancouver, British Columbia, Canada.
406. Chen, P., Zou, Y., Shi, S., & **Zhu, W.** (2012). BMI growth curve of children in Jiangsu, China: 6-18 yr. old. Paper presented at 2012 American College of Sports Medicine Annual Meeting, San Francisco, California.
407. Fan, B., Liu, X., Zhang, C., & **Zhu, W.** (2012). Changes in health-related physical physique measures of Shanghai older males between 2000 and 2010. Paper presented at 2012 American College of Sports Medicine Annual Meeting, San Francisco, California.
408. Peng, L., Luo, J., Wu, J., & **Zhu, W.** (2012). Predictive validity of rating of perceived exertion: A cross-culture validation. Paper presented at 2012 American College of Sports Medicine Annual Meeting, San Francisco, California.
409. Zhang, F., Andrade, F., & **Zhu, W.** (2012). Educational achievement and career transition among Chinese elite athletes after retirement. Paper presented at 2012 American College of Sports Medicine Annual Meeting, San Francisco, California.
410. Yu, H., **Zhu, W.**, Qiu, J., & Zhang, C. (2012). Physical activity scale for elderly (PASE): A cross-validation study for Chinese older adults. Paper presented at 2012 American College of Sports Medicine Annual Meeting, San Francisco, California.
411. Zhang, C., Fan, B., Liu, X., & **Zhu, W.** (2012). Fitness secular trends of Shanghai older women and local district impact: 2000-2010. Paper presented at 2012 American College of Sports Medicine Annual Meeting, San Francisco, California.
412. Zhang, F., Andrade, F., & **Zhu, W.** (2012). Educational achievement and career transition among Chinese elite athletes after retirement. Paper presented at 2012 American College of Sports Medicine Annual Meeting, San Francisco, California.
413. **Zhu, W.**, & Boiarskaia, E. (2012). A Pareto principle (20-80 rule) analysis of daily physical activity and diabetes impact. Paper presented at 2012 American College of Sports Medicine Annual Meeting, San Francisco, California.
414. **Zhu, W.**, Plowman, S.A., & Wang, J. (July, 2012). Linking field walking tests together using test equating: A validation study. Paper presented at International Convention on

Science, Education & Medicine in Sport (2012 Pre-Olympic Congress), Glasgow, UK.

415. **Zhu, W.**, & Zhu, D. (July, 2012). What is missing from current Tai chi/Qi-gong and health research? Paper presented at International Convention on Science, Education & Medicine in Sport (2012 Pre-Olympic Congress), Glasgow, UK.
416. **Zhu, W.** (Sept., 2012). Tai Chi and health: Lessons learned and future direction. Paper presented at 3<sup>rd</sup> Shenjiang International Forum on Wushu. Shanghai, China.
417. **Zhu, W.** (Nov., 2012). Theory and practice in youth fitness evaluation. Paper presented at 11<sup>th</sup> Annual Conference of the Society of Chinese Scholars on Exercise Physiology and Fitness (5<sup>th</sup> Shanghai International Forum on Exercise and Health). Shanghai, China.

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418. **Zhu, W.** (March, 2013). Physical fitness readiness and studying abroad. Paper presented in the Hang Zhou School of Shinyway Education, Hang Zhou, China.
419. Teatro, C., Kulinna, P.H., **Zhu, W.**, Boiarskaia, E., & Wilde, B. (April, 2013). Secondary students' healthy behavior knowledge: An update. The paper presented at the AAHPERD 2013 National Convention, Charlotte, North Carolina.
420. Teatro, C., Kulinna, P.H., **Zhu, W.**, Boiarskaia, E., & Wilde, B. (April, 2013). Validating middle school fitness knowledge assessments. The paper presented at the AAHPERD 2013 National Convention, Charlotte, North Carolina.
421. **Zhu, W.** (April, 2013). Mediation analysis: Why every researcher should know it. The paper presented at the AAHPERD 2013 National Convention, Charlotte, North Carolina.
422. **Zhu, W.** (April, 2013). Science and art of setting standards (cutoff scores) in Kinesiology. The paper presented at the AAHPERD 2013 National Convention, Charlotte, North Carolina.

#### **B. Invited and/or Refereed Locally/Regionally**

1. **Zhu, W.** (1989). *Oriental fitness movement*. Lecture presented at the Fourteenth Annual Wisconsin Dance Conference.
2. **Zhu, W.** (1991). *Traditional Chinese Healing Arts*. Taichi Center, Madison, Wisconsin.
3. Krause, J. & **Zhu, W.** (1992). *Passing rates of inner-city children and youth on physical fitness standards*. Paper presented at the 1992 MAHPERD Convention, Grand Rapids, Michigan.
4. Sloan, W.W. & **Zhu, W.** (1992). *Motivation and urban college students' participation of PE*



- activity courses*. Paper presented at the 1992 MAHPERD Convention, Grand Rapids, Michigan.
5. **Zhu, W.** (1992). *A survey of major expectations of oriental exercises*. Paper presented at the 1992 MAHPERD Convention, Grand Rapids, Michigan.
  6. **Zhu, W.** (1992). *Traditional Chinese Healing for HIV/AIDS Patient*. Wellness inc., Detroit, Michigan.
  7. **Zhu, W.** (1992). *What do we learn from health fitness standards?* Paper presented at the 1992 MAHPERD Convention, Grand Rapids, Michigan.
  8. **Zhu, W.** (1993). *Chinese Healing: Qi-Gong*. Paper presented at the 1993 MAHPERD Convention, Traverse City, Michigan.
  9. **Zhu, W.** (1993). *Predictive validity of skinfold measures: A meta-analysis*. Paper presented at the 1993 MAHPERD Convention, Traverse City, Michigan.
  10. Safrit, M.J., **Zhu, W.**, Pedersen, E., & Engels, H. (1994). *AAHPERD new fitness assessment*. Paper presented at the 1994 MAHPERD Convention, Detroit, Michigan.
  11. **Zhu, W.** (1994). *Chinese Qi-Gong for health*. Paper presented at the 1994 MAHPERD Convention, Detroit, Michigan.
  12. Chen, Y., Engels, H.-J., & **Zhu, W.** (1995). *Transthoracic impedance measurement of cardiac output during maximal cycle exercise in healthy young adult females*. Paper presented for the 1995 Midwestern ACSM annual meeting, Chicago, IL.
  13. Engels, H.-J., & **Zhu, W.** (1995). *FITNESSGRAM -- AAHPERD new fitness assessment*. Paper presented at the MAHPERD annual convention, Battle Creek, MI.
  14. Feng, S., **Zhu, W.**, & Engels, H.-J. (1995). *Reliability of a scale of children's beliefs about exercise*. Paper presented at the Midwest District AAHPERD 1996 annual conference, Dearborn, MI.
  15. Seidler, T., & **Zhu, W.** (1995). *Computer application for HPR professionals*. Paper presented at the MAHPERD annual convention, Battle Creek, MI.
  16. **Zhu, W.** (1995). *Fitness status of Detroit children*. Paper presented at the 1995 Detroit Community Cardiovascular Health Coalition, Detroit Health Department, Detroit, Michigan.
  17. Drouin, J., Engels, H.-J., **Zhu, W.**, & Kazmierski, J.F. (1996). *Relationship and determinants of two clinical balance measures in older adults*. Paper presented at Michigan Physical Therapy annual conference, Lansing, MI.
  18. **Zhu, W.**, Engels, H.-J., & Feng, S. (1996). *Fitness assessment: Using FITNESSGRAM and Physical Best tests*. Paper presented at the 1996 MAHPERD Convention, Traverse City, Michigan.
  19. Hodges-Kulinna, P., & **Zhu, W.** (1998). *Portfolios: How to make them an assessment system*. Paper presented at Michigan Association of Colleges for Teacher Education (MACTE), Dearborn,

Michigan.

20. **Zhu, W.** (2006). *The practice of Qi-gong for health*. Lecture and demonstration presented at the Reclaiming Your Life, the 9th Faculty/Staff Seminars, University of Illinois at Urbana-Champaign, Urbana, Illinois.
21. **Zhu, W.** (2006). *Qi-gong for stress management*. Lecture and demonstration presented at the Campus Honors Program "Scholar Adventurers Series," University of Illinois at Urbana-Champaign, Urbana, Illinois.

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### **III. RESEARCH: GRANTS/CONTRACTS RECEIVED**

1. **Zhu, W.** (1990). Development of a physical fitness knowledge test for high school students (\$3,310, Research Stimulation Fund Grants Program, Wayne State University, 1990-1991).
2. **Zhu, W.** (1990). New test theory for sport psychometrics (\$600, Small Research Grant Program, Wayne State University, 1990-1991).
3. **Zhu, W.** (1991). Development of a multimedia first aid and CPR test (\$580, Research Stimulation Fund Grants Program, Wayne State University, 1990-1991).
4. **Zhu, W.** (1991). Relationships among physical fitness, self-esteem, and academic achievement in elementary school children (\$24,000.00, Research Contract with The Chrysler Fund - AAU Physical Fitness Program at Indiana University, 1991-1994).
5. **Zhu, W.** (1991). Development of a computerized visual testing model. (\$500, International Travel Grants, Wayne State University, 1991-1992).
6. **Zhu, W.** (1991). Development of a basketball official multimedia test (\$550, Research Stimulation Fund Grants Program, Wayne State University, 1991-1992).
7. **Zhu, W.** (1992). Assessing HIV/AIDS risk behavior (\$650, Small Research Grant Program, Wayne State University, 1992-1993).
8. **Zhu, W.** & Gleason, J. A. (1992). HIV/AIDS support groups (\$2,000, Research Stimulation Fund Grants Program, Wayne State University, 1992-1993).
9. **Zhu, W.** (1993). Development of a HIV/AIDS risk screening nomogram. (\$6,810, Research Award Program, Wayne State University, 1992-1993).
10. **Zhu, W.** (1993). Effects of 30-Week Chinese Qi-Gong exercise intervention on HIV/AIDS patients. (\$8,900, Minority Research Fund Grants Program, Wayne State University, 1992-1993).
11. Engels, H.-J., Smouter, J., & **Zhu, W.** (1994). Health Kids 2000 - Get with it. (\$950.00) Healthy People 2000 Project Grants - 1994, American College of Sports Medicine.
12. **Zhu, W.** (1994). Detroit HIV/AIDS support group survey. (\$5,000.00, Research Contract with

- Southeastern Michigan Health Association, Detroit Health Department).
13. **Zhu, W.** (1995). Effects of 8-week Tai Chi exercise on inner-city older adults. (\$8,900, Minority Research Fund Grants Program, Wayne State University, new proposal for a previous grant).
  14. **Zhu, W.** (1996). A Tai Chi balance exercise program for inner-city older adults (\$2,910). Michigan Fitness Foundation.
  15. **Zhu, W.** (1996). Assessment of children's balance (\$2,250). NeuroCom International, Inc.
  16. Kang, S.J., **Zhu, W.**, & Seaman, J. (1997). Development of physical and motor fitness tests for the disabled (\$10,000). The Korea Sports Association for the Disabled.
  17. **Zhu, W.** (1997). An investigation of urban women's physical activity and nutrition patterns, perceived barriers, and the risk of coronary heart disease (\$10,000). CDC (CFDA#93.135), subcontracted through University of South Carolina.
  18. **Zhu, W.** (1998). Evaluation program communities of color (\$4,500). Research Contract with the Michigan Department of Public Health for Prevention Services.
  19. **Zhu, W.** (1999). A pilot study of a sampling plan used in a NIH grant proposal (\$2,705). Interdisciplinary Research Seed Fund, Wayne State University.
  20. **Zhu, W.** (1999). The health education/risk reduction program for 36<sup>th</sup> District Court in Detroit (\$4,000), subcontracted through Detroit Health Awareness Group.
  21. **Zhu, W.**, & Kulinna, P.H. (1999). Exemplary physical education curriculum (EPEC) effectiveness project (\$15,000). Michigan Fitness Foundation.
  22. **Zhu, W.**, McAuley, E., & Washburn, R. (1999). Development of an exercise barrier instrument for individuals with physical disabilities (\$14,510), the Research Board, UIUC.
  23. **Zhu, W.** (2000). Rasch data analysis for the second EPEC effectiveness project (\$1,000). Fitness Finders/Michigan Fitness Foundation.
  24. **Zhu, W.**, & Kenndy, J.J. (2000). Disability measurement and public policy: Problems and possible solutions (\$14,818), Mary Jane Neer Research Fund.
  25. **Zhu, W.** (2001). Data mining of hierarchical determinants of the obesity epidemic (\$35,989). National Center for Supercomputing Applications (Fellows Program).
  26. **Zhu, W.** (2002). Development of a computerized adaptive system to measure physical activities of person with disability (\$16,017), Mary Jane Neer Research Fund.
  27. **Zhu, W.** (2002). Pilot study of the sampling and survey plan for a modified NIH grant proposal (\$27,681), the Research Board, UIUC.
  28. **Zhu, W.** (2002). *E*-coder system for scoring physical activity diaries of older adults (\$10,000), Aging Initiative Incentive Grant, UIUC.

29. **Zhu, W.** (2002). Psychometric analysis of the ACSM certification examinations (\$11,949), American College of Sports Medicine.
30. **Zhu, W.** (2002, Consultant). Development and dissemination of performance indicators and assessment tasks for assessing and evaluating student performance in school physical education. (\$102,000; Oct. 2001 - Oct. 2002). Center for Disease Control and Prevention.
31. **Zhu, W.**, Hasegawa-Johnson, A. M., Rudner, M. L., Quiroga, A.C., Washburn, A.R., Robinson, J., & Wolf, J. (2002). Development and validation an *E*-diary system for assessing physical activity and travel behaviors (\$100,013). Active Living Policy & Environmental Studies, Robert Wood Johnson Foundation.
32. **Zhu, W.**, Hedrick, B., Evans, E., & Tripp, A. (2002). Determining MET values for selected physical activities of individuals with disabilities (\$19,820). The Research Board, UIUC.
33. Hillman, C.H., McAuley, E., Kramer, A.F., Boileau, R.A., & **Zhu, W.** (2003). Exercise, executive processes, and the aging brain (\$908,065). National Institutes of Health (NIH).
34. **Zhu, W.** (2003). Alternative medicine, health and culture (\$500). The Illinois Program for Research in the Humanities (IPRH).
35. **Zhu, W.** (2003). Psychometric analysis of the ACSM certification examinations (\$24,521), American College of Sports Medicine.
36. **Zhu, W.**, Hedrick, B., Tripp, A., & Evans, E. (2003). Development, calibration and cross-validation of "WheelTrak." A device to measure the physical activity of wheelchair users (\$15,000). Mary Jane Neer Research Fund, UIUC.
37. Welk, G.J., Peterson, K, Greene, G., **Zhu, W.**, Matthews, C., & Hebert, J. (2004). Application of test equating principles to physical activity assessments: Creating common physical activity outcomes for the BCC project. (\$25,000). Behavior Change Consortium.
38. **Zhu, W.** (2004). Development and Validation of Walking Space Measure (14,983) AAHPERD.
39. **Zhu, W.** (2004). Supplement: Psychometric analysis of the ACSM certification examinations (\$27,759), American College of Sports Medicine.
40. **Zhu, W.** (2004). Illinois State Obesity Research Project (\$25,000) Illinois Department of Public Health.
41. **Zhu, W.** (2004). Obesity Millennium Neighborhood I (\$20,000). Illinois Department of Public Health.
42. Lee, M., & **Zhu, W.** (2005). An investigation of perceived physical activity barriers of blind and visually impaired individuals (\$5,000). AAHPERD Research Grant Program, AAHPERD.
43. Shinew, Kimberly, Stodolska, M., Santos, C., Nedovic-Budic, Z., & **Zhu, W.** (2005). Environmental preferences and park use for physical activity among Latino(a) American urban residents (\$130,000). Active Living Research Program, Robert Wood Johnson Foundation.

44. Mason, M., Zhang, X, Christoffel, K.K., Schofer, J.L., **Zhu, W.**, & Murtha, T. (2005). Safety and Built Environments Relationship to Children's Physical Activity: A pilot study (\$145,000). Active Living Research Program, Robert Wood Johnson Foundation.
45. **Zhu, W.** (2005). A jump rope test to predict children and youth's aerobic capacity: A pilot study for a testing protocol (\$4,100). IAHPERD: Jump Rope for Heart.
46. **Zhu, W.**, & Mason, M. (2005). Tracking childhood obesity in Illinois (\$80,000). Illinois Department of Public Health.
47. **Zhu, W.** (2005). Obesity Millennium Neighborhood II (\$10,000). Illinois Department of Public Health.
48. **Zhu, W.** (2005). Walking for Health: Measurement and Research Issues and Challenges Conference (\$5,000). The National Center for Chronic Disease Prevention.
49. **Zhu, W.** (2005). We Move Kids! (\$9,850). Robert Wood Johnson Foundation.
50. **Zhu, W.** (2005). Disability research initiatives. 2005-2006 Schneider Research Award (\$43,576). College of Applied Life Studies. University of Illinois at Urbana-Champaign.
51. **Zhu, W.** (2005). NASPE physical education assessment project (\$13,000). National Association for Sport and Physical Education.
52. **Zhu, W.** (2005). Children and youth's healthy eating knowledge and behavior: An evidence-based review. (\$5,000). Consortium to Lower Obesity in Chicago Children (CLOCC).
53. **Zhu, W.** (2005). Development and validation of a measurement device of children's physical activity space. (\$15,000). Consortium to Lower Obesity in Chicago Children (CLOCC).
54. **Zhu, W.**, & Chodzko-Zajko, W. (2005). Walking for health conference (\$20,000). National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), NIH.
55. **Zhu, W.**, Hasegawa-Johnson, M., & Roth, D. (2005). A cell-phone *E*-diary system for assessing physical activity of individuals with disabilities (\$15,000). Mary Jane Neer Research Fund.
56. **Zhu, W.**, Nedovic-Budic, Z., McAuley, E., Olshansky, R., Chodzko-Zajko, W., Metzger, J., Brendley, K.W., Marti, J. (2005). Environmental characteristics of older adults' walking space: An agent-based modeling pilot study (\$50,000). Active Living Research Program, Robert Wood Johnson Foundation.
57. **Zhu, W.** (2005). Step-count accuracy and consistency of Omron HJ-700IT pedometers (\$20,000). Omron Healthcare, Inc.
58. **Zhu, W.** (2006) IAHPERD Children Obesity Research Contract (\$16,508). IAHPERD.
59. **Zhu, W.** (2006). Developing of a national physical education knowledge test (\$58,919). Human Kinetics.
60. **Zhu, W.** (2006). IAHPERD Children Obesity Research Contract: The DuPage Health Fitness Project

- (\$12,400). IAHPERD.
61. **Zhu, W.** (2006). Primer-test centered equating method for cut-off score setting (\$10,000). The Cooper Institute.
  62. **Zhu, W.** (2006). NASPE physical education assessment project (Renewal; \$13,000). National Association for Sport and Physical Education.
  63. **Zhu, W.** (2006). Youth fitness tracking study (\$35,000). Indiana University Foundation.
  64. **Zhu, W.** (2007). Physical Activity Persuasive Technology: Innovation and Entrepreneurship (\$15,000). The Academy for Entrepreneurial Leadership, University of Illinois.
  65. **Zhu, W.,** Burgener, S., & Zeiders, R. (2006). 8-Week Qi-Gong Intervention for Community-Dwelling Older Adults with Arthritis. (\$13,577). Research Board, University of Illinois.
  66. **Zhu, W.** (2007). County-Wide Health Fitness Project. (\$18,206). DuPage Regional Office of Education's Department of Education's PEP Grant.
  67. **Zhu, W.** (2007). Obesity Millennium Neighborhood Project III (\$5,400). Illinois Department of Public Health.
  68. **Zhu, W.** (2007). Guo Lin Qi-gong exercise for long-term cancer survival (\$150,382). National Institute of Health.
  69. **Gao, Y. & Zhu, W.** (2008). Differential item functioning analysis of physical activity disparities in USA (\$3,000). The American Alliance for Health, Physical Education, Recreation and Dance.
  70. **Zhu, W.** (2008). Nutrition, physical activity and obesity evaluation project (\$82,873). Illinois Department of Public Health.
  71. **Zhu, W.** (2008). County-wide health fitness project I (\$73,372). US Department of Education.
  72. **Zhu, W.** (2008). County-Wide Health Fitness Project (\$53,655). DuPage regional Office of Education [subcontract on US Department of Education, Carol M. White Physical Education Program (PEP) grant].
  73. **Zhu, W.** (2008). DuPage FitnessGram Assessment (\$47,956). DuPage regional Office of Education.
  74. **Zhu, W.** (2008). Evaluation of Fitness and Academic Data from the Texas Youth Fitness Project (\$63,114). Cooper Institute (subcontract on a Robert Wood Johnson Foundation grant).
  75. **Zhu, W.** (2008). NASPE PEmetrics (\$10,460). National Association for Sport and Physical Education (NASPE).
  76. **Zhu, W.,** Nandkumar, R., & Datta, A. (2009). Illinois Department of Public Health's Child Surveillance Project: Web-based Database of Certificate of Child Health Examination Forms' Data (\$100,000). Illinois Department of Public Health.

77. **Zhu, W.,** Nandkumar, R., & Datta, A. (2009). Coordinated School Health Technical Assistance (\$7,000). Illinois Department of Human Services, Illinois Department of Public Health.
78. **Zhu, W.** (2009). Chinese healing arts: Development of a new study-abroad course (\$2,500). The Office of the Associate Provost for International Affairs (APIA).
79. **Zhu, W.,** Nandkumar, R., & Datta, A. (2009). Coordinated School health technical Assistance (\$43,000). Illinois Departemnt of Public Health.
80. **Zhu, W.** (2009). China/CSX Project (\$7,272). Indiana University, Bloomington, Department of Kinesiology.
81. **Zhu, W.** (2010). Rasch advanced data analysis of AIMFREE (Accessibility Instruments Measuring Fitness and Recreation Environments) (\$15,000). Research subcontract from University of Illinois at Chicago/National Institute of Health.
82. **Zhu, W.** (2010) Rehabilitation Engineer Research Center on Recreation Technologies and Exercise Physiology Benefitting Persons with Disabilities (50% RA Fall 2010 & Spring 2011, Summer 2011 Grad Hourly). Research subciontrac with University of Illinois at Chicago/US Dept. of Education.
83. **Zhu, W.,** Nandkumar, R., & Datta, A. (2010). Coordinated School health technical Assistance (\$43,000). Illinois Departemnt of Public Health.
84. **Zhu, W.** (2011). Setting equivalent cut-off scores for FITNESSGRAM'S One-Mile Walk Test (\$10,000). The Cooper Institute.
85. **Zhu, W.** (2011). Data analysis for cut-off score setting, adult FitnessGram (\$7,005). The Cooper Institute.
86. **Zhu, W.** (2011). Chinese body-mind exercise & healing arts: Development of a new study-abroad course (\$2,100). Study Abroad Office, University of Illinois.
87. **Zhu, W.** (2011). Sports/Physical Activity Informatics: Principles and Methods - A proposal for "Informatics Curriculum Development" (\$10,000). Illinois Informatics Institute, University of Illinois.
88. **Zhu, W.** (2011). Coordinated school health technical assistance (\$49,000). Illinois Department of Human Services.
89. **Zhu, W.** (2011). Improving cancer survivor's physical activity recall via new lifelogging technology. Research Board, University of Illinois.
90. **Zhu, W.** (2011-12). Improving cancer survivor's physical activity recall via new lifelogging technology (\$15,774). Research Board, University of Illinois.

91. **Zhu, W.** (2013-2015). *Research Quarterly for Exercise and Sport* operation (\$99,000). AAHPERD.
92. **Zhu, W.** (2013-2014). Hungary National Fitness Study and Cooper International Youth Fitness Software Development (\$202,938), Cooper Institute.

Unrestricted Research Gift

93. **Zhu, W.** (2013) For physical activity measurement and assessment research. (\$27,500) IPICO Sports.
94. **Zhu, W.** (2013) For youth physical activity and fitness research (\$12,751) Nanjing ERSUN Network Technology Co., Ltd.

Submitted/Pending/Revising

**IV. TEACHING**

**A. Years at University of Illinois at Urbana-Champaign (UIUC)**

1999-2008 Associate Professor  
 2008-current Professor

**B. Years at Other Colleges/Universities**

1985-1986 Lecturer, Shanghai Physical Culture College, China  
 1986-1990 Teaching Assistant, University of Wisconsin-Madison  
 1988-1990 Instructor of Workshop, University of Wisconsin-Madison  
 1990-1993 Visiting Assistant Professor, Wayne State University  
 1994-1998 Assistant Professor, Wayne State University  
 1998-1999 Associate Professor, Wayne State University

**C. Courses Taught**

**a. Undergraduate**

Physical Education 5500 - Evaluation and Measurement in Health and Physical Education, 1991-1999, Wayne State University.



Kines 385 - Supervised experiences in Kinesiological research, 2000, 2001, UIUC.

Kines 301 - Observation and evaluation in Kinesiology, Fall 2000 - Current, UIUC.

Kines 401 – Measurement, evaluation and statistics in Kinesiology, Fall 2000 – Current, UIUC.

Kines 394 - Ethics in behavioral science, 2002, UIUC.

Kines 199 - Qi-gong, UIUC, 2003, UIUC.

Kines 199 - Foot reflexology, 2003, UIUC.

Kines 199 - Qi-gong for stress management, 2005, UIUC.

Kines 199 - Qi-gong for Health & Inner Harmony (First-Year Discovery Program, Office of the Provost), 2006, 2007 UIUC.

### **b. Graduate**

Physical Education 858 - Seminar: Professional Literature, Computer Application in HPR. Fall, 1990 & Summer, 1992, Fall, 1993, 1994, 1995.

HPR 756 - Seminar: Professional Literature, Computer Application in HPR, 1993-current.

HPR 654 - Designing and Conducting Surveys, Summer, 1996.

HPR 654 - Principles of Exercise Science: Measurement and Evaluation (team lecturing), 1996-97.

HPR 654 - Application of Exercise Science: Measurement and Evaluation (team lecturing), 1996-98.

EER 7660 - Advanced Statistics Lab, 1998.

EER 8770 - Advanced Measurement II, 1998, WSU.

HPR 6540 / EER 7900 - Doing Qualitative Research Using NUD\*IST, 1999

Kines 493 - Independent Study, 1999, UIUC.

Kines 495/501 - Research Methods in Kinesiology, Spring 2000 - Current, UIUC .

Kines 494 - Advanced Measurement Concept in Applied Life Studies, Fall 2001 – Current, UIUC.

Kines 594 - Physical Activity Persuasive Technology: Innovation and Entrepreneurship, Spring, 2009, UIUC.

## **D. Essays/Theses/Dissertations Directed or Co-directed**

### **a. Students by Name, Level, Title of Project, Year (Role)**

Stacey Rudd, Ph.D.,

A behavioral, hierarchical taxonomy of athletic development: Policy implications, and application to the sport of artistic gymnastics., Illinois State University, 1991 (Committee member) .

Cynthia R. Fletcher, Master,

Effects of education on the attitudes and beliefs of high school females toward breast self-examination, Wayne State University, 1994 (Committee member).

Susan Bertolini, Master thesis (1995) Evaluation of the KASPER after School Program, Wayne State University, 1995 (Member).

Chen, Y., Master,

Transthoracic impedance measurement of cardiac output during maximal cycle exercise in healthy young adult females, 1996 (Committee member).

Feng, S. Master,

Rasch equating of English and Chinese versions of a psychomotor self-efficacy scale, Wayne State University, 1997 (Advisor).

Pamela A. Crosson, Master,

Perceived exercise barriers of urban African-American women: A focus-group study, Wayne State University, 2000 (Advisor).

Kathy Jackson, Master,

Exercise barriers: Black women's perspectives, Wayne State University, 2000 (Advisor).

(Note: Both Crosson and Jackson were WSU students to whom I continuously advised after I moved to UIUC)

Trout Joshua Michae, Master thesis (2000). Twenty-four hours of sleep deprivation and muscular endurance and peak force in men and women (Member).

Angelo Pascale, Doctoral dissertation (2001), Regional fat distribution in older adults with Niddm related to different physical activity levels(Member).

Chakang Pongurgsorn, Doctoral dissertation (2001).A questionnaire to assess physical activity in Thailand, (Member).

Anne G. Copay, Doctoral dissertation (2002), The impact of moderate activity on fat oxidation, (Member).

Meredith McCarthy, Doctoral dissertation (2002), Physical activity, physical fitness and pulmonary function in individuals with paraplegia and able-bodies controls (Member).

Liang Hu, Master Student (2004), Does the physical self-efficacy scale assess self-efficacy or self-esteem? (Member).

Minsoo Kang, Doctoral dissertation (2004). An empirical investigation of characteristics of children's physical activity recall (Chair)

Brian Regan, Doctoral dissertation (2004). Psychometrical issues in neuropsychological testing of mild traumatic brain injuries (Chair).

Michael S. McElroy, Master thesis (2004). Angoff method and athletic training testing (Member).

Jennifer E. Stumpf, Master thesis (2005). Examining the validity of a computerized short-term memory assessment recall tool (member).

Yang Yang, Doctoral dissertation (2005). The effect of a 5-month Taiji Training on older adult's balance, gait, and self-efficacy (Member).

Rajashekar Gaddam (Department of Veterinary Clinical Medicine, College of Veterinary Medicine), Master thesis, in progress, The effect of diet and exercise on body composition in the dog (Member).

Miyoung Lee, Doctoral dissertation (2007), FITME: A model to assess physical activity of persons with disabilities (Chair).

Yong Gao, Doctoral dissertation (2008), Differential item functioning analysis of physical activity disparities in U.S. (Chair).

Matthew J. Sabin, Doctoral dissertation (2011), Reliability and validity of the modified sensory star excursion balance test: Influence of concussion history (Member).

Sara Khosravinasr, Master paper (2011) (Advisor)

David N. Daum, Doctoral dissertation (2011), Physical Education Teacher Educator's Perceptions of Online Physical Education (Member).

Youngsik Park, Doctoral dissertation (2012), Introducing analytic hierarchy process (AHP) to kinesiology using an actual study: Selecting athletic shoes for walking using AHP (Chair).

Edward Ofori, Doctoral Student (2012-), Aging, sensory feedback, and force control (Member).

Marco S. Boscolo, Doctoral Student, **completed** (Advisor/Chair)

Eng Wah (Vincent) Teo, Doctoral Student, **completed** (Advisor/Chair)

Elena Boiarskaia, Doctoral Student, in progress (Advisor)

Yan Yang, Doctoral Student in progress (Advisor)

Jong Cheol Shin, Master Student in progress (Advisor)

Deborah Linares, Doctoral dissertation committee (Member)

## **E. Course of Curriculum Development**

Physical Education 858 - Computer Application in Health, Physical Education, and Recreation, Wayne State University, 1993.

HPR 654: Designing and Conducting Survey, Wayne State University, 1996.

EER 8770 - Advanced Measurement II (a course focusing on the item response theory), Wayne State University, 1998.

EER 7660 - Advanced Measurement/Statistics Lab, Wayne State University, 1998.

HPR 6540 /EER 7900 - Doing Qualitative Research Using NUD\*IST, Wayne State University, 1999

Kines 495: Research Methods in Kinesiology, UIUC, 2000. (I updated the content of this course by including many new hands-on learning activities related to research skills.)

Kines 394: Ethics in behavioral science, UIUC, 2000. (I updated the content of this course completely.)

Kines 199: Qi-gong, UIUC, 2003 (I developed and co-taught this new course with a Qi-gong master from China)

Kines 199: Foot reflexology, UIUC, 2003 (I developed and co-taught this new course with a master from China)

Kines 199: Qi-gong for stress management, UIUC, 2005 (I developed and taught this new course).

Kines 199: Qi-gong for health and inner harmony, UIUC, 2006 (I developed and taught this new course).

Kines 594: Physical Activity Persuasive Technology: Innovation and Entrepreneurship (I developed and taught this new course).

Kines 401: Measurement and Evaluation in Kinesiology (Online course, which I developed with UIUC's online education department)

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## **V. SERVICE**

### **A. Journal/Editorial Activity**

#### **a. Editorships of Journals or Other Learned Publications**

*Research Quarterly for Exercise and Sport* (Editor-in-Chief, 2013-current)

*Measurement in Physical Education and Exercise Science* (Editorial Board, 1997-current)

*Physical Activity Today* (Editorial Board, 1998-1999)

*Research Quarterly for Exercise and Sport* (Measurement Section Editor, 1999-2005)

*International Journal of Applied Sport Science* (Editorial Board, 2000-current)

*Journal of Applied Measurement* (Editorial Board, 2001-current)

(Chinese) *Sport Science* (Guest Editor of “Oversea News and Trend”, 2002)

*Journal of Physical Activity and Health* (Editorial Board, 2003-2007).

*Journal of Physical Activity and Health* (Associate Editor, 2007-current).

*Czech Kinanthropology Journal* (Editorial Board, 2008-current).

*International Education* (Editorial Board, 2008-current).

*Journal of Physical Education and Sport* (Romania; Editorial Board, 2009-)

*Annales Kinesiologiae* (Slovenia; Editorial Board, 2009-)

*International Journal of Fundamental and Applied Kinesiology* (Croatia, Editorial Board, 2011-)

*Journal of Sport and Health Science* (China, Editorial Board, 2011-).

### **b. Other Editorships**

Member of the *MAHPERD Journal* Editorial Board, 1996-1999.

Feature Editor for *Journal of Physical Education, Recreation and Dance*. (Feature: Alternative assessment: What, why, how)

Supplement Editor for *Medicine & Science in Sports & Exercise* (Supplement Vol 40, July, 2008: Walking for Health: Measurement and Research Issues and Challenges)

## **B. Positions Held in Professional Associations**

Member, the National Measurement and Evaluation Advisory Committee (1991-1998).

Vice-President of Professional Development (Elect), the Michigan Association for Health, Physical Education, Recreation & Dance (1992-93).

The Measurement and Evaluation Review Panel for the 1993 Research Consortium AAHPERD Convention Program.

Vice-President of Professional Development, the Michigan Association for Health, Physical Education, Recreation & Dance (1993-94).

Physical Education Referent Group, Department of Education, State of Michigan (1993-1999).

Invited Discussion Panel of the International Society for Measurement and Evaluation program at the 1994 AIESEP World Congress, Berlin.

The Measurement and Evaluation Review Panel for the 1993-2000 Research Consortium AAHPERD Convention Program.

The Measurement and Evaluation Review Panel for the 1994 Research Consortium AAHPERD Convention Program.

Vice-President of Professional Development (Past), the Michigan Association for Health, Physical Education, Recreation & Dance (1994-95).

The Research Design and Statistics Review Panel for the 1995 Annual Meeting of the American College of Sports medicine.

The Research Design and Statistics Review Panel for the 1996 American College of Sports Medicine Annual Meeting.

The Research Design and Statistics Review Panel for the 1996 American Educational Research Association Annual Meeting.

Alliance Michigan State Fitness Coordinator, American Alliance for Health Physical Education, Recreation and Dance, 1996-1997.

Member of AAALF By-Laws Committee, AAHPERD, 1996-1997.

Chair, the Measurement and Evaluation Review Panel for the 1997 Research Consortium AAHPERD Convention Program.

Chair-Elect, Chair, and Chair-Past, Measurement and Evaluation Council, AAALF, AAHPERD, 1997-99.

Member, the Examinations Subcommittee, Committee on Certification and Education, American College of Sports Medicine, 1997-current.

Chair, the Measurement and Evaluation Review Panel for the 1998 Research Consortium AAHPERD Convention Program.

Member, the Board of Research Consortium, AAHPERD, 1998-2001.

Member, the Scientific Program Committee for the Cooper Institute conference series: Measurement of Physical Activity (held in conjunction with the 9th Measurement and Evaluation Symposium), Dallas, Texas, October, 1999.

Member, the Organizing Committee for the Cooper Institute conference series: Measurement of Physical Activity (held in conjunction with the 9th Measurement and Evaluation Symposium), Dallas, Texas, October, 1999.

Consultant, PE Quality Task Force, NASPE, American Alliance of Health, Physical Education,

Recreation and Dance, 2001-current.

Member, the Grant committee of Research Consortium, AAHPERD, 2001 and 2002.

Consultant, Early Childhood Longitudinal Study, Department of Education, 2002-2003.

Member, the FITNESSGRAM Advisory Committee, the Cooper Institute for Aerobics Research, Dallas, Texas, 2002-current.

Member, the Measurement and Evaluation Review Member for the 2002 Convention Program of Research Consortium, American Alliance of Health, Physical Education, Recreation, and Dance, 2002.

Chair, the Organizing Committee for the ACSM-UIUC Kinesmetrics Symposium Series I: Measurement issues and Challenges in Aging Research, Champaign, IL, October, 2003.

Chair, the Scientific Program Committee for the ACSM-UIUC Kinesmetrics Symposium Series I: Measurement issues and Challenges in Aging Research, Champaign, IL, October, 2003.

Member, AAHPERD Alliance Scholar Committee, American Alliance of Health, Physical Education, Recreation and Dance, 2002-2004.

The Measurement and Evaluation Review Panel for the 2006 Research Consortium AAHPERD Convention Program, 2005, AAHPERD.

Chair, the Organizing Committee for the ACSM-UIUC Kinesmetrics Symposium Series II: Walking for Health: Measurement issues and Challenges, Champaign, IL, October, 2005.

Chair, the Scientific Program Committee for the ACSM-UIUC Kinesmetrics Symposium Series II: Walking for Health: Measurement issues and Challenges, Champaign, IL, October, 2005.

Member, Science Board, The President's Council on Physical Fitness and Sports. 2005-2008.

Chair, ACSM Task Force on Airport Walking Committee, American College of Sports Medicine. 2006-2007.

The Measurement and Evaluation Review Panel for the 2007 Research Consortium AAHPERD Convention Program, 2006, AAHPERD.

Co-Chair, the 2007 Cooper Institute Conference Series: Diversity in Physical Activity and Health: Measurement and Research Issues and Challenges, the Cooper Institute.

The Measurement and Evaluation Review Panel for the 2007-11 Research Consortium AAHPERD Convention Program, 2007-2011 AAHPERD.

Member, President's Committee on Position Papers, National Academy of Kinesiology, 2011.

## **C. Professional Consultation**

### **a. Public Presentations as an Expert in Discipline**

Content Advisory Panel for the Michigan Teacher Competency Testing Program, the Michigan Department of Education and the State Board of Education, 1991.

Panel for the Physical Education Planning Committee, Detroit Public School, 1992.

Panel for the Planning Committee of the HIV Prevention and Adolescent Conference, Wayne State University, 1992.

Reviewer for *Research Quarterly for Exercise and Sport*, 1993-current.

Reviewer for *Measurement in Physical Education and Exercise Science*, 1996-current.

Reviewer for *Journal of Gerontology*, 1998.

Reviewer for *Medicine & Science in Sports & Exercise*, 1998-current.

Reviewer for *Journal of Applied Measurement*, 1998 - current.

Reviewer for *Journal of Sport & Exercise Psychology*, 1999-current.

Reviewer for *Journal of Sport and Social Issues*, 1999-current.

Reviewer for *Biological Research for Nursing*, 2002-current.

Reviewer for *Ethnicity & Disease*, 2006-current.

Reviewer for *American Journal of Epidemiology*, 2006-current.

Reviewer for *American Journal of Preventive Medicine*, 2006-current.

Statistical and measurement consultant for Cosmos Corporation, Bethesda, MD (Sept., 1999).

NIH review panel for the Institute of Aging, National Institute of Health, 2003.

NIH review panel for the Institute of National Institute of Diabetes and Digestive and Kidney Diseases, 2004 – current.

National panel for the National Expert Meeting on Qi Gong and Tai Chi, Urbana, IL, 2005.

Review panel for the 2007 Annual Conference of Society of Behavioral Medicine, 2006.

Expert panel for the Adapted Physical Education Workshop (sponsored by the Department of Education, Oregon State University and University of Utah), Salt Lake City, UT, 2006.

External grant review panel for the University Grants Committee of Hong Kong, 2006.

Dissertation External Review Panel for the University of Mysore, India, 2006.



Distinguished speaker for the 1st Annual Conference for Optimizing & Revitalizing the Role of the Preceptor, Oak Brook, IL, 2006.

Panel for the conference of Exercise and Recreational Technology for People with Disability: State of the Science, American College of Sports Medicine, Denver, Colorado, 2006.

External grant review panel for the Research Grants Council (RGC) of Hong Kong, 2007.

External grant review panel for the Research Enhancement Program in the Social Sciences and Humanities: Research on Women, Wayne State University, MI, 2006.

External dissertation examiner, James Cook University, Australia, 2009.

Panel for the Center of Youth Physical Fitness and Health Promotion, Jiangsu Province, China, 2012.

**b. Consulting to Public Agencies, Foundations, Professional Associations**

Statistical and methodological consulting for Detroit Health Department, City of Detroit (1993-2002).

**D. Committee Assignments at Universities/Colleges/Departments**

**a. University Committee Membership**

Physical and mental wellbeing subcommittee, University/model school, Wayne State University, 1993.

The Academic Senate, Wayne State University, 1998-1999.

The student affairs subcommittee, The Academic Senate, Wayne State University, 1998-1999.

Senate, University of Illinois at Urbana-Champaign, 2002-2004.

University wellness committee, University of Illinois at Urbana-Champaign, 2005-present.

University “Walk for Wellness” committee, University of Illinois at Urbana-Champaign, 2005-present.

**b. College/Department Committees Chaired**

Special event committee, Division of Health, Physical Education, and Recreation, College of Education, Wayne State University, 1994.

The college personal committee, College of Education, Wayne State University, 1998-1999.

**c. College/Department Committee Membership**

College Assessment Committee, Wayne State University, 1990-1993

Graduate Committee, Division of Health, Physical Education, and Recreation, Wayne State University, 1990-1999.

Faculty Search Committee (1991)--Sports psychology, Wayne State University.

Faculty Search Committee (1992-94)--Health, Wayne State University.

Regular Graduate Faculty (1994-current), Wayne State University and UIUC

Search Committee (1996)--Curriculum laboratory manager, Wayne State University.

Faculty Search Committee (1997, 1998)--Sports administration, Wayne State University.

Faculty Search Committee (2001) – Motor control/human factor, UIUC.

Member, the Library Committee (2002-2006) – Applied Life Studies Library, UIUC.

Chair, Faculty Search Committee (2002) – Physical education/sport pedagogy, UIUC.

Member, the Alleged capricious grading committee (2002-current), College of Applied Life Studies.

Member, Faculty Search Committee (2002) – Motor control/human factor, Dept. of Kinesiology, UIUC.

Member, Advisory Committee (2002-2005) – Dept. of Kinesiology, UIUC.

Member, Educational Policy Committee (2004-current) – Dept. of Kinesiology and Community Health, UIUC.

Member, Department Tenure and Promotion Committee (2005-present), Dept. of Kinesiology and Community Health, UIUC.

Member, Mary Jane Neer Research Fund review committee (2006-2010), College of Applied Life Science.

Member, the Library Committee (2006-2012) – Applied Life Science Library, UIUC.