## CURRICULUM VITA

#### Akihito Kamata

#### **GENERAL INFORMATION**

**University Address:** 6116 N. Central Expressway

Express Tower Suite 400

Southern Methodist University

Dallas, TX 75206

E-mail Address: akamata@smu.edu

# **Professional Preparation**

Sept. 1991 to Ph.D., Michigan State University, East Lansing, MI. Aug. 1998 Major: Measurement and Quantitative Methods.

Dissertation: Some generalizations of the Rasch model by the hierarchical

generalized linear model.

Sept. 1989 to M.S., Eastern Washington University, Cheney, WA.

Dec. 1990 Major: Experimental Psychology.

April 1984 to B.Ed., University of Yamanashi, Kofu, Japan. March 1988 Major: Elementary Education and Psychology.

## Sabbatical-equivalent Study

Jan. 2005 to Statistical and Applied Mathematical Sciences Institute (SAMSI),

May 2005 Research Triangle Park, NC.

I participated their Social Science Program as the New Researcher Fellow (see the Fellowship section below) and lead a work group and collaborated with

other scholars at the Institute.

# **Professional Experience**

Aug. 2013 – Professor – Department of Education Policy & Leadership, Simmons School

of Education & Human Development; Department of Psychology, Dedman College of Humanities & Sciences; Center of Research and Evaluation, Simmons School of Education and Human Development, **Southern** 

Methodist University.

Sept. 2011 to Department Head –Department of Educational Methodology, Policy and

Aug. 2013 Leadership, University of Oregon.

Sept. 2009 to Aug. 2013	<b>Professor</b> –Department of Educational Methodology, Policy and Leadership, University of Oregon.
May. 2007 to Aug. 2009	<b>Department Chair</b> –Department of Educational Psychology & Learning Systems, <b>Florida State University</b> .
Aug. 2004 to Aug. 2009	<b>Associate Professor</b> – Measurement & Statistics Program, Department of Educational Psychology & Learning Systems, College of Education, <b>Florida State University</b> .
Aug. 1998 to Aug. 2004	Assistant Professor – Measurement & Statistics Program, Department of Educational Psychology & Learning Systems (formerly Department of Educational Research), College of Education, Florida State University.

# **Visiting Professorship**

Jan. 2005 to	Visiting Research Associate Professor, Department of Psychology,
June 2005	University of North Carolina at Chapel Hill. I engaged in research activities
	with faculty members in the Thurstone Psychometric Laboratory in the
	Department of Psychology.

# **Fellowship**

**Statistical and Applied Mathematical Sciences Institute** (SAMSI), Research Triangle Park, North Carolina. I was selected as the only Fellow for the 2004-05 Social Science Program. (September 2004)

# **Membership in Professional Organizations**

- American Educational Research Association
- National Council of Educational Measurement
- Psychometric Society

### **SCHOLARLY ACTIVITIES**

#### **Publications**

# **Refereed Journal Articles**

- Cheong, Y. F., & Kamata, A. (in press). Centering, scale indeterminacy, and differential item functioning: Detection in hierarchical generalized linear and nonlinear mixed models. *Applied Measurement in Education*.
- Koon, S. & Kamata, A. (in press). An applied examination of methods for detecting differential distractor functioning. *International Journal of Quantitative Research in Education*.
- Kamata, A., Nese, J. F. T., Patarapichayatham, C., & Lai, C. F. (2013). Modeling nonlinear growth the three data points: Illustration with benchmarking data. *Assessment for Effective Intervention*, 32, 105-116.
- Jiao, H., Kamata, A., Wang, S., & Jin, Y. (2012). A multilevel testlet model for dual local dependence. *Journal of Educational Measurement*, 49, 82-100.
- Patarapichayatham, C., Kamata, A., & Kanjanawasee, S. (2012). Evaluation of model selection strategies for cross-level two-way differential item functioning analysis. *Educational and Psychological Measurement*, 72, 44-51
- Fukuhara, H. & Kamata, A. (2011). A bi-factor multidimensional item response theory model for differential item functioning analysis on testlet-based items. *Applied Psychological Measurement*, *35*, 604-622.
- Bares, C. B., Andrade, F., Delva, J., Grogan-Kaylor, A. & Kamata, A. (2011). Differential Item Functioning between Chilean Boys and Girls on a Measure of Anxiety and Depression. *International Journal of Social Psychiatry*. May 31, 2011, DOI: 10.1177 / 0020764011400999.
- Atar, B. & Kamata, A. (2011). Comparison of IRT likelihood ratio test and logistic regression DIF detection procedures. *Hacettepe University Journal of Education*, *41*, 36-47.
- Patarapichayatham, C., Kamata, A., & Kanjanawasee, S. (2009). Cross-level two-way differential item functioning analysis model by multilevel Rasch modeling. *Journal of Research Methodology & Cognitive Science*, 7, 15-21.
- Li, H., Lee, D., Pfeiffer, S. I., Kamarta, A., Kumtepe A. T., & Rosado, J. (2009). Measurement invariance of the Gifted Rating Scales among participants from Puerto Rico, China, U.S., Turkey, and South Korea. *School Psychology Quarterly*, 24, 186-198.
- Johnson, M. B., Edmonds, W. A., Kamata, A., & Tenenbaum, G. (2009). Determining individual affect-related performance zones (IAPZs): A tutorial. *Journal of Clinical Sport Psychology*. *3*, 34-57.

- Edmonds, W. A., Tenenbaum, G., Kamata, & Johnson, M. (2009). The role of collective efficacy in adventure racing teams. *Small Group Research*. 40, 163-180.
- Kamata, A. & Bauer, D. J. (2008). A note on the relationship between factor analytic and item response theory models. *Structural Equation Modeling*. *15*, 136-153.
- Bilir, M. K., Binici, S., & Kamata, A. (2008). Growth mixture modeling (GMM): Application to reading achievement data from a large scale assessment. *Measurement and Evaluation in Counseling and Development*, 41, 104-117.
- Edmonds, W. A., Tenenbaum, G., Mann, D. T. Y., Johnson, M., & Kamata, A. (2008). The effects of biofeedback training on affective regulation and simulated race car performance: A multiple case study analysis. *Journal of Sport Sciences*, 26, 1-13.
- Johnson, M. B., Edmonds, W. A., Tenenbaum, G., & Kamata, A. (2007). The relationship between affect and performance in competitive intercollegiate tennis: A dynamic conceptualization and application. *Journal of Clinical Sports Psychology*, 1, 10-146.
- Chaimongkol, S., Huffer, W. F., & Kamata A. (2007). An explanatory different item functioninf (DIF) model by the WinBUGS 1.4. *Songklanakarin Journal of Science and Technology*, 29, 449-458.
- Chaimongkol, S., Huffer, W. F., & Kamata A. (2006). A Bayesian approach for fitting a random effect differential item functioning across group units. *Thailand Statistician*, 4, 27-41.
- Abell, N. Ryan, S. & Kamata, A. (2006). Assessing capacity for self-care among HIV-positive heads of household: Bilingual validation of the parental self-care scale. *Social Work Research*, *30*, 233-243.
- Abell, N., Ryan, S., & Kamata, A. (2006). Bilingual validation of the Family Responsibility Scale: Assessing stress among HIV+ heads of household stress. *Journal of Social Service Research*, *32*, 195-212.
- Kamata, A., & Tate, R. L. (2005). The performance of a method for the long-term equating of mixed format assessment. *Journal of Educational Measurement*. 42, 193-213.
- Hayashi, K. & Kamata, A. (2005). A note on the stability of Alpha Coefficient with standardized variables. *Psychometrika*, 70, 579-586.
- Chu, K. L., & Kamata, A. (2005). Test equating with the presence of DIF. *Journal of Applied Measurement*, 6, 342-354.
  - This paper was also published as a book chapter;
  - Chu, K.L., & Kamata, A. (2007). Test equating with the presence of DIF. In E. Smith & R. Smith (Eds). *Rasch measurement: Advanced and specialized applications* (pp. 390-404). Maple Grove, MN: JAM Press.

- Jiao, H, Wang, S., & Kamata, A. (2005). Exploring the possibility of using hierarchical generalized linear model to model local item dependence. *Journal of Applied Measurement*, 6, 311-321.
  - This paper was also published as a book chapter;
  - Jiao, H, Wang, S., & Kamata, A. (2007). Exploring the possibility of using hierarchical generalized linear model to model local item dependence. In E. Smith & R. Smith (Eds). *Rasch measurement: Advanced and specialized applications* (pp.435-451). Maple Grove, MN: JAM Press.
- Beretvas, S. N., & Kamata, A. (2005). The Multilevel Measurement Model: Introduction to the Special Issue. *Journal of Applied Measurement*, 6, 247-254.
- Wilke, D. J., Kamata, A., & Cash, S. J. (2005). Modeling treatment motivation in substance-abusing women with children. *Child Abuse & Neglect*, 29, 1313-1323.
- Kahraman, N., & Kamata, A. (2004). Increasing the precision of subscale scores by using out-of-scale information. *Applied Psychological Measurement*. 28, 407-426.
- Kamata, A., & Vaughn, B. K. (2004). An introduction to differential item functioning analysis. *Learning Disabilities: A Contemporary Journal*, 2, 49-69.
- Genc, E. & Kamata, A. (2004). Effect of field trip on students' science achievement: A meta-analysis. *Academic Exchange Quarterly*, 8(3), 121-124.
- Golden, A.S., Tenenbaum, G., & Kamata, A. (2004) Affect-related performance zones: An ideographic method for linking affect to performance. *International Journal of Sport & Exercise Psychology*, 2, 42-60.
- Kitsantas, A., Gilligan, T. D., & Kamata, A. (2003). College women with eating disorders: Self-Regulation, Life Satisfaction, and Positive/Negative Affect. *The Journal of Psychology*, 137, 381-395.
- Kamata, A., Tenenbaum, G., Hanin, Y. (2002). Individual Zone of Optimal Functioning (IZOF): A Probabilistic Conceptualization. *Journal of Sport & Exercise Psychology*, 24, 189-208.
- Kamata, A. (2001). Item analysis by the hierarchical generalized linear model. *Journal of Educational Measurement*, *38*, 79-93.
- Delva, J., Mathiesen, S. G. & Kamata, A. (2001). Use of illegal drugs among mothers in the United States: A multi-level analysis of individual and community level influences. *Ethnicity and Disease*, 11, 614-625.
- Bower, B. L., & Kamata, A. (2000). Factors influencing student satisfaction with online courses. *Academic Exchange Quarterly*, 4(3), 52-56.

Becker, B. J. & Synthesis Research Group. (1998). Mega-Review: Books on meta-analysis. *Journal of Educational and Behavioral Statistics*, 23, 77-92.

# **Books**

- Tenenbaum, G., Eklund, R. C., & Kamata, A. (Eds.) (2012). *Handbook of Measurement in Sport and Exercise Psychology*. Champain, IL: Human Kinetics.
- Abell, N., Springer, D. W., & Kamata, A. (2009). *Developing and Validating Rapid Assessment Instruments*. Oxford University Press.

# **Book Chapters**

- Vaughn, B. K., Lee, H-Y. & Kamata, A. (2012). Reliability. In G. Tenenbaum, R. C. Eklund, & A. Kamata (Eds.), *Handbook of Measurement in Sport and Exercise Psychology*. (pp.25-32). Champain, IL: Human Kinetics.
- Edmonds, W. A., Johnson, M. B., Tenenbaum, G. & Kamata, A. (2012). Idiosyncratic Measures in Sport. In G. Tenenbaum, R. C. Eklund, & A. Kamata (Eds.), *Handbook of Measurement in Sport and Exercise Psychology*. (pp.81-90). Champain, IL: Human Kinetics.
- Kamata, A. & Vaughn, B. K. (2011). Multilevel Item Response Theory Modeling. In J. Hox & J. K. Roberts (Eds.), *Handbook of Advanced Multilevel Analysis*. (pp. 41-57). New York: Routledge.
- Kamata, A., Bauer, D. J., & Miyazaki, Y. (2008). Multilevel Measurement Model. In A. A. O'Connell & D. B. McCoach (Eds.). *Multilevel Analysis of Educational Data*. (pp.345-388). Charlotte, NC: Information Age Publishing.
- Kamata, A. & Cheong, F. (2007). Multilevel Rasch model. In M. von Davier & C. H. Carstensen (Eds). *Multivariate and mixture distribution Rasch models: Extensions and applications* (pp. 217-232). New York: Springer.
- Tenenbaum, G., Kamata, A., & Hayashi, K. (2007). Measurement in sport and exercise psychology: A new Outlook on selected issues of reliability and validity. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (3<sup>rd</sup> ed) (pp.757-773). Hoboken, NJ: Wiley.

# **Non-Refereed Publications Completed**

Kamata, A. (2007). Effects of FCAT test items on students with disabilities and English language learners. Florida Department of Education, August 2007 (Award Number: 371-90950-7R002).

- Kamata, A. & Genc, E. (2005). A study of DIF for students with testing accommodations and its random effect for some NAEP science and mathematics assessment items. Institute of Education Sciences, U.S. Department of Education (Award # R902B030025).
- Hassler, L., Kamata, A., Tenenbaum, G., Urena, C., & Alfano, C. (2004). *NROTC Scholarship Selection Model: Overview and Evaluation Report*. Naval Education and Training Command. (Award # N00140-02-Q-3342).
- Tate, R. L., & Kamata, A. (1999). *Recommendations for the Future of FCAT*, Florida Department of Education, October, 1999 (Award # 371-90950-90004).

### **Presentations**

# **Keynote Presentations**

- Kamata, A. (2012). Monitoring students' progress. Keynote presentation at the Fifth International Conference on Educational Reform, Thailand, March 2012. [International]
- Kamata, A. & Binici, S. (2009). *IRT Test Equating and Linking*. One-day invited workshop for the DFG Summer Academy, Bamberg, Germany, August 2009. [International]
- Kamata, A. (2009). *The Global Issues and Trends in Educational Statistics: Merging Psychometric and Statistical Models*. Keynote presentation at the Annual Meeting of International Meeting of Educational Research, Thailand, January 2009. [International]

### **Workshops**

Kamata, A. & Patarapichayatham, C. (2011). *Mplus Workshop*. Three-day workshop at Chulalongkorn University, Bangkok, Thailand, March 2011. [International]

# **Refereed Presentations**

- Jiao, H., von Davier, M., Kamata, A., & Chen, Y-F. (2011). *A multilevel Rasch mixture testlet model*. Paper presented at the annual meeting of American Educational Research Association, New Orleans, LA, April, 2011. [National]
- Patarapichayatham, C., Kamata, A., & Jiao, H. (2011). Evaluation of the ability estimates under the bifactor testlet model. Poster presented at the annual meeting of National Council on Educational Measurement, New Orleans, LA, April, 2011. [National]
- Yurekli, H., & Kamata, A. (2011). *The relationship between parameters from two polytomous item response theory models*. Poster presented at the annual meeting of National Council on Educational Measurement, New Orleans, LA, April, 2011. [National]
- Nese, J., Park, B., Kamata, A., Alonze, J., & Tindal, G. (2011). *The reliability of CBM reading growth estimates for different student groups*. Paper presented at the annual meeting of National Council on Educational Measurement, New Orleans, LA, April, 2011. [National]
- Liu, Q., & Kamata, A. (2010). Item purification in differential item functioning using generalized linear mixed model. Paper presented at the annual meeting of National Council on Measurement in Education, Denver, CO, May 2010. [National]

- Cho, K., Lee, S-J., & Kamata, A. (2010). The effect of testlet variance on Q3 statistics. Paper presented at the annual meeting of National Council on Measurement in Education, Denver, CO, May 2010. [National]
- Jiao, H., Kamata, A., Wang, S., & Jin, Y. (2010). Simultaneous modeling of item and person dependence using multilevel Rasch measurement model. Paper presented at the annual meeting of American Educational Research Association, Denver, CO. May 2010. [National]
- Patarapichayatham, C., Kanjanawasee, S., & C., Kamata, A. (2009). *Cross-level Two-way Differential Item Functioning Analysis Model by the Multilevel Rasch Modeling: Investigation of Parameter Estimates*. Poster presented at the annual meeting of Florida Educational Research Association, Orlando, FL, November, 2009. [State]
- Kamata, A., Kim, R-S., Bilir, M. K., (2009). Investigation of the utility of the Bayesian mixtureitem DIF detection model. Paper presented at the annual meeting of National Council on Measurement in Education, San Diego, CA, April 2009. [National]
- Bilir, M. K., & Kamata, A. (2009). Simultaneous estimation of differential item functioning for manifest groups and latent classes. Poster presented at the annual meeting of National Council on Measurement in Education, San Diego, CA, April 2009. [National]
- Hawthorne, H. J., Fukuhara, H., Park, S-W., Kamata, A. (2009). An investigation of differential performance on reading test items for English language learners. Paper presented at the annual meeting of American Educational Research Association, San Diego, CA, April 2009. [National]
- Vaughn, B. K., Cheong, Y. F., & Kamata, A. (2008). *An investigation on the utility of the 3-level hierarchical generalized linear model for DIF detection*. Paper presented at the annual meeting of National Council on Measurement in Education, New York, March 2008. [National]
- Fukuhara, H., & Kamata, A. (2008). A testlet response theory DIF detection model: A Bayesian approach. Paper presented at the annual meeting of National Council on Measurement in Education, New York, March 2008. [National]
- Kamata, A., Cheong, Y. F. (2007). *Multilevel Rasch models*. Paper presented at the annual meeting of National Council on Measurement in Education, Chicago, IL, April 2007. [National]
- Vaughn, B. K., Kamata, A. (2007). A Bayesian hierarchical, generalized linear model of random differential item functioning for polytomous items. Paper presented at the annual meeting of American Educational Research Association, Chicago, IL, April 2007. [National]
- Kamata, A., Bauer, D. J., & Miyazaki, Y. (2007). *Multilevel Measurement Modeling*. Paper presented at the annual meeting of American Educational Research Association, Chicago, IL, April 2007. [National]
- Cheong, Y. F., & Kamata, A. (2007). A comparison of three DIF detection procedures using hierarchical generalized linear and nonlinear mixed models. Paper presented at the annual meeting of American Educational Research Association, Chicago, CA, April 2007. [National]
- Kamata, A., & Bauer, D. J. (2007). A note on the relationship between factor analytic and item response theory models. Paper presented at the annual meeting of Florida Educational Research Association, Tampa, FL, November, 2007. [State]

- Park, S., Shin, I., & Kamata, A. (2007). *Growth model for two parallel processes: Examining the relationship between FCAT math and reading developmental scale scores.* Paper presented at the annual meeting of Florida Educational Research Association, Tampa, FL, November, 2007. [State]
- Bilir, M. K., Kim, R., & Kamata, A. (2007). *Utility of Mixture Item Response Theory Models and Multilevel Item Response Theory Models to Capture Heterogeneity of Item Difficulties*. Paper presented at the annual meeting of Florida Educational Research Association, Tampa, FL, November, 2007. [State]
- Fukuhara, H., bilir, K., Park, S., & Kamata, A. (2007). The effect of content representation for anchor items in IRT equating: A simulation study. Paper presented at the annual meeting of Florida Educational Research Association, Tampa, FL, November, 2007. [State]
- Chaimongkol, S., Huffer, F. W., Kamata, A. (2006). *New parameterizations of DIF parameters in multilevel logistic regression models: A Bayesian perspective.* Paper presented at the annual meeting of American Educational Research Association, San Francisco, CA, April 2006. [National]
- Jiao, H, Wang, S., Kamata, A., & Miyazaki, Y (2006). An investigation of local item dependence using multilevel testlet model. Paper presented at the annual meeting of National Council of Educational Measurement, San Francisco, CA, April 2006. [National]
- Kamata, A. (2005). *Overview of existing approaches for multilevel measurement modeling*. Presentation at the opening workshop of the Statistical and Applied Mathematics Sciences Institute, Research Triangle Park, NC, September 2005. [National]
- Kamata, A. Chaimongkol, S., Genc, E., & Bilir, M. K. (2005). *Random-Effect Differential Item Functioning Across Group Unites by the Hierarchical Generalized Linear Model*. Paper presented at the annual meeting of American Educational Research Association, Montreal, Canada, April 2005. [National]
- Fukuhara, H., Zhang, Y., & Kamata, A. (2005). *Standardized alpha coefficient as an estimate of scale reliability*. Paper presented at the annual meeting of American Educational Research Association, Montreal, Canada, April 2005. [National]
- Binici, S., & Kamata, A. (2005). *Multilevel DIF analysis using hierarchical generalized linear model*. Paper presented at the annual meeting of American Educational Research Association, Montreal, Canada, April 2005. [National]
- Chaimongkol, S., Huffer, F. W., Kamata, A. (2005). *Modeling Differential Item Functioning* (*DIF*) *Using Multilevel Logistic Regression Models: A Bayesian Perspective*. Paper presented at the annual International Meeting of the Psychometric Society, Tilburg, Netherlands, July 2005. [International]
- Kamata, A., Tenenbaum, G., Alfano, C., Urena, C., & Hasller, L. (2004). Some methodological comments from a validation study for a U.S. military scholarship selection model. Paper presented at the annual meeting of International Military Testing Association, Brussels, Belgium, October, 2004. [International]
- Kamata, A., Fukuhara, H., & Zhang, Y. (2004). *Estimating scale reliability by Cronbach's alpha with standardized variables*. Paper presented at the annual convention of American Psychological Association, Honolulu, HI, July, 2004. [National]
- Kamata, A., Chaimongkol, S., & Genc, E. (2004). *Accommodated Sample in the NAEP Science Data*. Paper presented at the annual meeting of Florida Educational Research Association, Tampa, FL, November, 2004. [State]

- Zhang, Y., Fukuhara, H., & Kamata., A. (2004). *Standardized alpha coefficient under congeneric test conditions*. Paper presented at the annual meeting of Florida Educational Research Association, Tampa, FL, November, 2004. [State]
- Kamata, A., & Binici, S. (2003). *Random Effect DIF Analysis via Hierarchical Generalized Linear Modeling*. Paper presented at the biannual International Meeting of the Psychometric Society, Sardinia, Italy, July 2003. [International]
- Kamata, A., Turhan, A., & Darandari, E. (2003). *Estimating Scale Reliability of Multidimensional Composite Scores*. Paper presented at the annual meeting of American Educational Research Association, Chicago, April 2003. [National]
- Kamata, A. & Tate, R.L. (2003). *Performance of proposed method for the long term equating of a mixed format test*. Paper presented at the annual meeting of National Council on Measurement in Education, Chicago, April 2003. [National]
- Chu, K., & Kamata, A. (2003). *Testing Equating with the presence of DIF*. Paper presented at the annual meeting of American Educational Research Association, Chicago, April 2003. [National]
- Jiao, H. & Kamata, A. (2003). *Modeling Local Item Dependence Using the One-Parameter Hierarchical Generalized Linear Model*. Paper presented at the annual meeting of American Educational Research Association, Chicago, April 2003. [National]
- Abell, N., Ryan, S., & Kamata, A. (2003). *Cross-cultural validation of scales for families infected/affected with HIV/AIDS*. Paper presented at Society for Social Work and Research, Washington, D.C, January 2003. [National]
- Kamata, A. (2002). *Procedures to Perform Item Response Data Analysis by HLM*. Paper presented at the annual meeting of American Educational Research Association, New Orleans, April 2002. [National]
- Capar, N.K. & Kamata, A. (2002). *Increasing the Precision of Subscale Scores by Using Out-of-Scale Information*. Paper presented at the annual meeting of American Educational Research Association, New Orleans, April 2002. [National]
- Tate, R.L., & Kamata, A. (2002). *Performance of proposed method for the long term equating of a mixed format test*. Paper presented at the annual meeting of National Council on Measurement in Education, New Orleans, April 2002. [National]
- Kamata, A., Tenenbaum, G., & Hanin, Y. (2001). *Individual Zone of Optimal Functioning* (*IZOF*): A Probabilistic Conceptualization. Paper presented at 10<sup>th</sup> World Congress of Sport Psychology, Skiathos, Greece, May 2001. [International]
- Kamata, A., & Bower, B.L. (2001). *Faculty going the distance: Motivations, incentives, and satisfaction in Florida community colleges*. Paper presented at the 19<sup>th</sup> International Conference on Technology and Education, Tallahassee, FL, May, 2001. [International]
- Kamata, A. (2000). *Precision of person ability estimates from one-parameter hierarchical generalized linear logistic model*. Paper presented at the annual meeting of American Educational Research Association, New Orleans, April, 2000. [National]
- Chu, K., & Kamata, A. (2000). Assessment of non-equivalent group equating methods. Paper presented at the annual meeting of American Educational Research Association, New Orleans, April, 2000. [National]
- Turhan, A. & Kamata, A. (2000). *Effects of multidimensionality in vertical equating with the application of multiple-group IRT*. Paper presented at the annual meeting of National Council of Educational Measurement, New Orleans, April, 2000. [National]
- Kamata, A. (2000). *Multi-level Latent Regression Analysis by the Hierarchical Linear Generalized Model*. Paper presented at the annual meeting of the Florida Educational Research Association, Tallahassee, FL, November, 2000. [State]

- Delva, J., Mathiesen, S., & Kamata, A. (1999). *Multi-level epidemiological analysis of the association between mental health problems and drug use among mothers in the United States*. Paper presented at the World Congress of Mental Health, Santiago, Chile, September, 1999. [International]
- Mathiesen, S.G., Delva, J., & Kamata, A. (1999). *Multi-level epidemiological analysis of drug use among U.S. Mothers*. Paper presented at the Annual Meeting of CPDD, Acapulco, Mexico, June, 1999. [International]
- Kamata, A. (1999). *Multi-level DIF Analysis by the Hierarchical Linear Generalized Model*. Paper presented at the annual meeting of the Florida Educational Research Association, Deer Field Beach, FL, November, 1999. [State]
- Kamata, A. (1998). One-Parameter Hierarchical Generalized Linear Logistic Model: An Application of Hierarchical Generalized Linear Model to Item Response Theory. Paper presented at the Annual Meeting of American Educational Research Association, San Diego, April, 1998. [National]
- Becker, B.J. & Kamata, A. (1994). *Another Look at the Relationship between School Expenditures and Students' Achievement*. Paper presented at the Annual Meeting of American Educational Research Association, New Orleans, April, 1994. [National]

### **Contracts and Grants**

# **Contracts and Grants Funded**

- Kamata, A. Evaluation of the performance of bi-factor model in testlet based computer adaptive reading test. (March 2009 February 2012; Total award \$103,511) This is a subcontract to Foorman, B. Measuring Reading Progress in Struggling Adolescents. Funded by Institute of Educational Science U.S. Department of Education to Florida State University (March 2009 February 2012). Total award \$1.5M.
- Kamata, A. Differential Item Functioning Analyses for Students with Test Accommodations on NAEP test items. Funded by **Institute of Educational Science U.S. Department of Education** (July 2003 May 2005; Award Number: R902B030025). Total award \$95,163.
- Kamata, A. Effects of FCAT test items on students with disabilities ad English language learners. Funded by **Florida Department of Education** (Oct. 1, 2006 Aug. 31, 2007; Award Number: 371-90950-7R002). Total award **\$45,000**.
- Hassler, L., Tenenbaum, G., & Kamata, A. NROTC Scholarship Selection Model Evaluation and Revision. Funded by **Naval Educational and Training Command** (Oct. 2002 December 2003; Award Number: N00140-02-Q-3342). Total award **\$1,700,000**.
- Tate, R. & Kamata, A. A Study of Tasks Related to the Florida Comprehensive Achievement Test. Funded by **Florida Department of Education** (May 1999 Aug. 1999; Award Number: 371-90950-90004). Total award **\$21,952**.
- Kamata, A. Professional Service Related to Student Assessment. Funded by **Leon County School Board** (July 2002 June 2008). Total award **\$162,150**.

- Kamata, A. Tasks Associated with Large Scale Assessment Programs. Funded by **Florida Department of Education** (Aug. 2008 Aug. 2009; Award Number: 371-90950-9R001).

  Total award **\$80,000**.
- Kamata, A. Tasks Associated with Large Scale Assessment Programs. Funded by **Florida Department of Education** (Aug. 2007 Aug. 2008; Award Number: 371-90950-8R001).

  Total award \$80,000.
- Kamata, A. Tasks Associated with Large Scale Assessment Programs. Funded by **Florida Department of Education** (Aug. 2006 Aug. 2007; Award Number: 371-90950-7R002).

  Total award \$75,000.
- Kamata, A. Tasks Associated with Large Scale Assessment Programs. Funded by **Florida Department of Education** (Sept. 2005 Oct. 2006; Award Number: 371-90950-6R001).
  Total award \$74,976.
- Kamata, A. Tasks Related to Florida Comprehensive Achievement Test. Funded by **Florida Department of Education** (Sept. 2004 July; Award Number: 371-90950-5R003). Total award **\$43,156**.

#### **TEACHING**

## **Courses Taught at University of Oregon**

EDLD 610 Structural Equation Model II

EDLD 661 Item Response Theory I

EDLD 610 Hierarchical Linear Model II

**EDLD 610 Introductory Statistics** 

EDLD 610 Equity and Achievement

EDLD 610 Measurement & Assessment II

EDUC 614 Educational Statistics I

## **Courses Taught at Florida State University**

EDF 5400 Basic Descriptive and Inference Statistics Applications

EDF 5402 Advanced Topics in Analysis of Variance

EDF 5406 Multivariate Analysis Applications

EDF 5432 Measurement Theory I

EDF 5434 Measurement Theory II

EDF 5435 Theory of Scaling

EDF 5481 Methods of Educational Research

## **Doctoral Dissertation Supervision**

- 14. Cheng-Fei Lai (Spring 2012, UO, Chair)
  - Identification of Students in Late Elementary Grades with Reading Difficulties
- 13. Sangwook Park (Summer 2011, FSU, co-Chair)
  - Factors that Cause an Unexpected Direction of Differential Distractor Functioning
- 12. Chalie Patarapichayatham (May 2010, Chulalongkorn University, Thailand, co-Chair)
  - Two-way Differential Item Functioning Analysis Using Hierarchical Generalized Linear Model
- 11. Sharon Koon (Spring 2010, FSU, co-Chair)
  - A Comparison of Methods for Detecting Differential Distractor Functioning
- 10. Mustafa Kuzey Bilir (Summer 2009, FSU, Chair)
  - Mixture Item Response Theory MIMIC Model: A Simultaneous Estimation of Differential Item Functioning for Manifest Groups and Latent Classes
- 9. Hirotaka Fukuhara (Spring 2009, FSU, Chair)
  - A Differential Item Functioning Model for Testlet-based Items Using a Bi-factor Multidimensional Item Response Theory Model: A Bayesian Approach
- 8. Salih Binici (Spring 2007, FSU, Chair)

- Random-effect Differential Item Functioning via Hierarchical Generalized Linear Model and Generalized Linear Latent Mixed Model: A comparison of estimation methods
- 7. Brandon Vaughn (Fall 2006, FSU, Chair)
  - A Bayesian approach for detecting DIF and its variation across group units for polytomous response items
- 6. Burcu Atar (Summer 2006, FSU, Chair)
  - Differential item functioning (DIF) analysis for mixed response data using IRT likelihood-ratio test and multilevel IRT procedures
- 5. Ahmet Turhan (Spring 2006, FSU, Chair)
  - Multilevel 2PL Item Response Theory Model (IRT) Vertical Equating with the Presence of Differential Item Functioning (DIF)
- 4. Saengla Chaimongkol (Spring 2005, FSU, co-Chair)
  - Modeling differential item functioning (DIF) using multilevel logistic regression models: A Bayesian perspective
- 3. Hong Jiao (Spring 2003, FSU, Chair)
  - Effects of Model Specification Error in Item Response Theory (IRT) Based Computerized Classification Test Using Sequential Probability Ratio Test
- 2. Kwang-lee Chu (Spring 2002, FSU, Chair)
  - Non-equivalent Group Test Equating with the Presence of Differential Item Functioning (DIF)
- 1. Nilufer K. Capar (Spring 2001, FSU, Chair)
  - Analyzing Multidimensional Response Data Structure Represented by Unidimensional IRT Models

#### **SERVICE**

# **University of Oregon**

#### University

• Off-Campus Scholarship and Grants Committee (member, 2009-2010)

## **College of Education**

- Measurement & Assessment Curriculum Committee (member, 2010-2011)
- Scholarship Committee (member, 2010-2011)
- Faculty Personnel Committee (Chair, 2009-2010; member, 2010-2011)
- Quantitative Methods Courses Committee (member, 2009-2011)

# Department of Educational Methodology, Policy and Leadership

• Search Committee for a faculty position in Educational Technology (Chair, 2009-2010)

# Florida State University

### University

- Graduate Policy Committee; Sub-committee for the GPC review of the Demography program (2006)
- University Library Committee (2001-2004)

# **College of Education**

- Tenure & Promotion Committee (member, 2007)
- Faculty Council (chair-elect, 2004; chair, 2005)
- Evaluation Committee (member, 2000)
- Curriculum Committee (alternate member, 2000)

### **Department of Educational Psychology & Learning Systems**

- Search Committee for an open-rank faculty position in Measurement & Statistics (chair, 2003)
- Search Committee for two assistant professor faculty positions in Measurement & Statistics (member, 2005, 2006)
- Search Committee for a faculty position in Program Evaluation (member, 1999, 2000)
- Annual Evaluation Committee (member, 1999, 2000, 2003, 2004; Chair 2006)
- Ad hoc committee for graduate student recruiting (1999, 2000)
- Ad hoc committee for computing facilities for Measurement & Statistics students (1999, 2000)

#### The Profession

# **Guest Editing for Refereed Journal**

Beretvas, S. N. & Kamata, A. (2005). Multilevel Measurement Modeling (Special issue). *Journal of Applied Measurement, 3*.

# **Editorial Board Membership**

Editorial Board Member (2004-2006). Psychological Methods.

# **Guest Reviewer for Refereed Journals**

- Psychological Methods
- Psychometrika
- Journal of Educational Measurement
- Applied Psychological Measurement
- Structural Equation Modeling
- Applied Measurement in Education
- Educational and Psychological Measurement
- Journal of Experimental Education
- Journal of American Statistical Association
- International Journal of Sports Psychology
- Behaviour Research and Therapy

# **Service to Professional Associations**

- National Council on Measurement in Education (NCME); Chair of the Training and Development Committee (2008-2009)
- Florida Educational Research Association (President-elect, 2006-2007; President, 2007-2008)
- Organizing Committee (member); 2007 International Meeting of **Psychometric Society**.
- Treasurer, Florida Educational Research Association (2003, 2004, 2005).
- Distinguished Paper Award Committee (Chair); The Annual Meeting of **Florida Educational Research Association**, 2001.
- Local Arrange Committee (member); The Annual Meeting of **Florida Educational Research Association**, 2000.
- Invited Panelist for Graduate Student Session at the Annual Meeting of American Educational Research Association (Division D); New Orleans, 2000.

### Consultation

# **Consultation**

- WIDA Consortium: Member of the Technical Advisory Committee for ACCESS for ELL<sup>®</sup>. (ACCESS for ELL<sup>®</sup> is a test for English language learners used in 17 states as a statewide assessment of English proficiency for ELL students. Statewide assessment of English proficiency for ELL students is a federal requirement for all states as a result of No Child Left Behind Act) (2006 current)
- **Michigan Department of Education**: Member for Michigan Assessment Research Committee (2006 2008)
- National Institute for Statistical Sciences (NISS): Task force for increasing U.S. participation rates in international assessments (2004 2005)
- **Florida Certification Board**: Psychometric consultant (2005 current)
- **Professional Associates**; Technical consultant (2004)
- Florida Educational Research Council, Inc.; Advisor (1999 2004)
- Florida Department of Juvenile Justice; Technical consultant (2000)