Bidya Raj Subedi, Ph.D.

Email: bidya.subedi3@gmail.com
457 Windmill Palm Circle, Altamonte Springs, Florida 32701, USA

Self-motivated research, evaluation and measurement professional; Proven ability to design and accomplish large-scale research and evaluation projects; Expertise in developing statistical designs and analyzing data employing basic and sophisticated predictive models; Creative and knowledgeable on innovative and latest research methods; Published research works in peer-reviewed journals and presented in regional/international conferences; Research areas: predicting student achievement/growth, teacher/school effectiveness, high school graduation/dropout, and behavioral outcomes by employing hierarchical linear/nonlinear (multilevel) modeling (HLM/HGLM); Currently working on a self-initiated and self-funded "Global Happiness Research"; Expertise in several statistical and measurement software and programs, such as SAS, SPSS, HLM, LISREL, BILOG-MG, PARSCALE.

EDUCATION

Florida State University Tallahassee, Florida, USA
Ph. D., Educational Measurement & Statistics 2005

Michigan State University East Lansing, Michigan**,** USA
M. A., Educational Psychology 1996
(Specialization: Measurement & Quantitative Methods)

PROFESSIONAL EXPERIENCE

Global Happiness Research (GHR), Altamonte Springs, Florida, USA May, 2023 – Present
Director

Responsibilities involved related to GHR study:

- Working on conducting surveys and data collections
- Working on searching Research Coordinators (RCs) for conducting surveys and data collections for selected countries
- Working on appropriate research design for GHR study

Tribhuvan University, Department of Education, Kathmandu, Nepal Dec., 2022–Present
Visiting Research Professor (Virtual/Online)

Responsibilities involved with the following activities:

- Reviewing doctoral dissertations related to their methodologies, research designs (employing basic and advanced statistical analyses), results and discussions,
- Providing recommendations to Ph.D. students for technical revisions of their dissertations, applying appropriate research methods in their dissertations in order to identify predictors impacting academic and non-academic outcomes.

School District of Palm Beach County, Florida, USA July, 2004 – Jan. 2021
Specialist, Evaluation and Test Development; Department of Research & Evaluation

Responsibilities involved with the following activities:

- Analyzed large-scale national assessment data such as SAT, ACT, PSAT, FCAT (Florida Comprehensive Assessment Tests) employing basic and advanced statistical analyses to produce reports, presentations, and research articles,

- Demonstrated leadership skills by successfully accomplishing projects and producing reports to identify predictors impacting academic and non-academic outcomes,
- Worked with educators and school staff for the improvement of assessments in education,
- Developed models to predict educational outcomes (e.g., student achievement/gain, graduation/dropout, and behavioral outcomes) using basic and advanced statistical models such as multiple regression and HLM to measure teacher as well as school effectiveness,
- Prepared technical reports related to student/teacher/school outcomes and presented reports to technical and non-technical audiences,
- Worked with item analysis, psychometric research, and other measurement issues collectively in the team to meet School District's goals and objectives,
- Presented papers in regional as well as international conferences and published research articles in peer-reviewed journals.

Accomplishments: Acquired proficiency in managing and reporting large-scale data by producing reports and papers; Acquired expertise in developing statistical designs as well as basic and advanced predictive models (e.g., HLM/HGLM) to measure student's academic growth and teacher/school effectiveness; Acquired proficiency presenting research and evaluation reports to technical and non-technical professionals; Acquired expertise working with SAS, SPSS and HLM; Presented papers in regional and international conferences and published research articles in peer-reviewed journals.

University of Central Florida April, 2005 – December, 2014

Orlando, Florida, USA (Worked with Dr. Bonnie Swan and Professor Michael Hynes)
Research Consultant

Responsibilities included involvement in the following activities:

- Worked as research and statistical consultant employing HLM technique for data management and reporting related to mathematics teacher preparation projects (funded by U.S. Department of Education),
- Developed research designs and managed/analyzed large-scale complex data from Orange County Public Schools (OCPS), Florida,
- Performed research for predicting students' mathematics achievement growth to measure teacher Effectiveness,
- Worked for reviewing and validating results of RTT (Race To the Top) project reports by performing statistical analyses from five Florida counties,
- Collaborated in presenting papers in conferences and publishing research articles in peer-reviewed journals.

Accomplishments: Acquired consulting expertise in data management, developing statistical designs, analyzing data, and establishing predictive models; Acquired proficiency in preparing and presenting reports to technical and non-technical audiences by demonstrating complex concepts (e.g., growth modeling); Presented papers in regional and international conferences; Published research articles in peer-reviewed journals.

Florida Department of Education February, 2003 – June, 2004

Tallahassee, Florida, USA
Research Assistant, Division of Accountability, Research, and Measurement

Responsibilities included involvement in the following activities:

- Involved in collecting, cleaning, managing, analyzing and interpreting large-scale FCAT (Florida Comprehensive Assessment Tests) scores for K-12 from all Florida schools,

- Developed research designs by formulating HLM models to predict student achievement growth using student, teacher, and school level predictors,
- Conducted research and evaluation projects using basic and advanced statistical analyses for producing different state and federal reports as per state and federal accountability rules,
- Worked with Florida school grading, accountability and evaluation systems.

Accomplishments: Acquired proficiency in managing and reporting large-scale data and developing appropriate research/evaluation designs and data analysis techniques using basic and advanced statistical models (e.g., HLM); Acquired expertise in measurement and statistical research using statewide (FCAT) test scores; Prepared and published different reports and papers.

Florida State University, Tallahassee, Florida, USA
Teaching Assistant August, 2000 – Dec., 2003
Doctoral Student August, 2000 – April, 2005
Dept. of Ed. Psychology & Learning Systems. College of Education

Responsibilities included involvement in the following activities:

- Taught graduate students applied educational statistics and measurement courses and graded students' papers in different courses such as multiple regression, research methods, HLM, multivariate statistics, ANOVA, and item response theory,
- Involved in data management and statistical analyses for longitudinal growth modeling using students' FCAT (Florida Comprehensive Assessment Test) test scores,
- Developed appropriate survey instruments and designs, conducted interviews and classroom observations of focus groups, collected and analyzed data for reporting purpose,
- Administered surveys in schools, performed reliability/validity tests of survey data, analyzed data and prepared reports and papers,
- Presented in different conferences and published papers in peer-reviewed journals,
- Completed doctoral dissertation research for demonstrating three-level HGLM (hierarchical generalized linear model) to educational researchers using United States national (NAEP) data set.

Accomplishments: Accomplished proficiency in demonstrating the advanced concept of statistics and measurement theories (through Ph.D. degree); Acquired expertise in advanced measurement and statistical analyses using appropriate software (e.g., SAS, HLM, SPSS, LISREL, BILOG-MG, PARSCALE, CONFA); Achieved in-depth knowledge of statistics and measurement research methods and hands-on skills in developing appropriate statistical designs for contextual and growth modeling; Acquired experience in reviewing and critiquing research papers; Produced, presented, and published papers and reports.

Michigan State University, East Lansing, Michigan, USA August, 1994 – July, 1996
Research Assistant and Graduate Student
Department of Counseling, Educational Psychology & Special Education.

Responsibilities:

- Involved in test scores and data management as well as analysis for Third International Math and Science Study (TIMSS),
- Involved in test development, item and test score analysis/interpretation, field survey research, and statistical analysis,
- Developed research designs, administered survey instruments, and collected data for Michigan Extension Education Workshop project,
- Worked in several projects in HLM for contextual and growth modeling using NELS datasets.

Accomplishments: Acquired master degree and skills in developing research designs, predictive models, tests and item analyses using classical and IRT test theories; Achieved knowledge and skills in developing survey instruments and administering surveys; Achieved skills in managing data and conducting psychometric and statistical analyses and preparing research papers based on such analyses.

Tribhuvan University Kathmandu, Nepal
Lecturer in Statistics Aug., 1996 – Aug., 2000
Lecturer in Educational Measurement and Evaluation

Responsibilities included involvement in the following activities:

- Taught statistics courses, such as inferential statistical methods, ANOVA, experimental design, multiple regression, survey research methods, multivariate statistics,
- Taught educational measurement and evaluation courses including test theory and applications, test development, educational assessment and evaluation,
- Developed educational assessments, and evaluated student performance in above courses,
- Directed graduate students' research projects and theses, engaged in consulting students with research projects using varieties of statistical and measurement techniques,
- Directed three grant-based research projects as a Principal Investigator (PI) and supervised staff,
- Developed research designs, survey instruments, administered surveys, and collected/analyzed field-based data,
- Presented complex research findings to technical and non-technical audiences,
- Published research articles in peer-reviewed journals.

Accomplishments: Acquired proficiency in teaching statistics courses, measurement and evaluation courses; Achieved expertise in developing research designs, survey instruments, data analysis, and report/paper writing; Acquired proficiency in presenting statistical analysis results to technical and non-technical audiences; Accomplished several grant-based projects as a PI; Research articles published in peer-reviewed journals.

PUBLICATIONS AND PRESENTATIONS

Selected Publications

Subedi, B. R. (2021). A multilevel approach of exploring the predictors of high school readiness. *Asian Journal of Social Science and Management Technology*, 3(1), 1-7. http://www.ajssmt.com/Papers/310107.pdf

Subedi, B. R., & Clement, R. (2020). A multilevel approach to exploring predictors of college readiness in reading and mathematics. *Advances in Social Sciences Research Journal*, 7(10) 364-378. https://journals.scholarpublishing.org/index.php/ASSRJ/article/view/9226

Subedi, B., Swan, B., & Hynes, M. (2020). *Are school factors important for measuring teacher effectiveness? A multilevel technique to predict student gains through a value-added approach*. Book Chapter. In: Zhang Yue, editor. Prime Archives in Education Research. Hyderabad, India: Vide Leaf. https://videleaf.com/are-school-factors-important-for-measuring-teacher-effectiveness-a-multilevel-technique-to-predict-student-gains-through-a-value-added-approach/

Subedi, B. R., & Howard, M. (2019). Exploring predictors of highly effective teachers through multilevel model. *Advances in Social Sciences Research Journal*, *6*(11), 321-332. https://doi.org/10.14738/assrj.611.7408

Subedi, B. R., & Howard, M. (2018). Exploring the predictors of college readiness for low achieving high school graduates through multilevel modeling. *Journal of Studies in Education*, 8(4), 146-160. http://www.macrothink.org/journal/index.php/jse/article/view/13859/11067

Subedi, B. R., & Howard, M. (2017). Multilevel predictors influencing reading achievement: Comparison of teacher effects in elementary, middle and high schools. *Advances in Social Sciences Research Journal*, 4(23), 98-106. http://scholarpublishing.org/index.php/ASSRJ/article/view/3944/2347

Subedi, B. R., & Powell, R. (2016). Factors influencing college readiness: A Multilevel study to measure school effects. *International Journal of Learning, Teaching and Educational Research*, 15 (11), 71-86. https://www.ijlter.org/index.php/ijlter/article/viewFile/789/pdf_1

Subedi, B. R., Reese, N., & Powell, R. (2015). Measuring teacher effectiveness through hierarchical linear models: Exploring predictors of student achievement and truancy. *Journal of Education and Training Studies*, 3(2), 34-43. http://redfame.com/journal/index.php/jets/article/view/666/610

Subedi, B., Swan, B., & Hynes, M. (2013). Predicting gain scores with hierarchical linear models: A value-added approach to measure teacher effectiveness. *Journal of Studies in Education*, 3(3), 149-162. http://www.macrothink.org/journal/index.php/jse/article/view/4187/3472

Subedi, B., & Howard, M. (2013). Predicting high school graduation and dropout for at-risk students: A multilevel approach to measure school effectiveness. *Advances in Education, 2(1)*. http://www.researchpub.org/journal/ae/number/vol2-no1/vol2-no1-2.pdf

Subedi, B., Swan, B., & Hynes, M. (2011). Are school factors important for measuring teacher effectiveness? A multilevel technique to predict student gains through a value-added approach. *Educational Research International*, 2011. http://www.hindawi.com/journals/edu/2011/532737/

Subedi, B. R. (2007)**.** Predicting reading proficiency in multilevel models: An ANOVA-like approach of interpreting effects**.** *Educational Research and Evaluation*, 13(4), 327-348.

Subedi, B. R. (2004). Predicting student achievement: A multilevel analysis of classrooms and schools. *Education and Development*, 20-33.

Subedi, B. R. (2003). Factors influencing high school student achievement in Nepal. *International Education Journal*, 4(2), 98-107.

Gutierrez, R., & **Subedi, B. R.** (2003). A survey instrument that measures the predisposition toward supporting collective decision making among high school students. *The Journal of Social Studies Research*, 27(1), 28-35.

Selected Presentations

Subedi, B. R., Reese, N., & Powell, R. (2014). *Predicting student achievement and behavioral outcomes through HSGI program intervening factors: A hierarchical modeling technique for estimating teacher effectiveness*. Paper presented at the annual meeting of Florida Educational Research Association, November 19-21, Cocoa Beach, Florida, USA.

Hou, J., Johnson, R., **Subedi, B. R.**, & Howard, M. (2014). *The effect of raters and schools on teacher observation scores*. Paper presented at annual meeting of the 2014 National Council on Measurement in Education (NCME), April 16-20, 2014, Philadelphia, Pennsylvania, USA.

Subedi, B. R., & William, R. (2012). *Determinants of high school graduation and dropout for at-risk students: A multilevel technique of measuring school effectiveness*. Paper presented at annual meeting of the 2010 Florida Educational Research Association, Gainesville, Florida, USA.

Subedi, B. R., Howard, M., & Christy, D. (2011). *Factors influencing high school graduation and dropout for at-risk students: A multilevel approach to measure school effectiveness.* Paper presented at annual meeting of the 2011 American Educational Research Association, Vancouver, Canada.

Subedi, B. R., Swan, B., & Hynes, M. (2010). Are school factors important for measuring teacher *effectiveness? A multilevel technique to predict student gains through value-added approach.* Paper presented at annual meeting of the 2010 American Educational Research Association, Denver, Colorado, USA.

Subedi, B. R., Swan, B., & Hynes, M. (2009). Predicting student gains with hierarchical models: A *value-added approach to measure teacher effectiveness*. Paper presented in 2009 annual meeting of American Educational Research Association, April 13-17, San Diego, California, USA.

Subedi, B. R., Swan, B., & Hynes, M. (2009). *Teacher and school factors influencing teacher effectiveness: A multilevel technique to predict student achievement through a value-added model*. Paper presented in the 2009 Florida Educational Research Association Meeting, November 18-20, Orlando, Florida, USA.

Subedi, B. R. (2007). *Predicting high school graduation and dropout using a hierarchical generalized linear modeling approach*. Paper presented in the 2007 annual meeting of Florida Educational Research Association, November 14-16, Tampa, USA.

Johnson, R., **Subedi, B. R.**, & Williams, R. (2007). *Developing a statewide FCAT growth scale.* Paper presented in the 2007 annual meeting of Florida Educational Research Association, November 14-16, Tampa, Florida, USA.

Subedi, B. R. (2006). *The effect of school poverty on achievement gain in Florida*. Paper presented in the 2006 annual meeting of Florida Educational Research Association, November 15-17, Jacksonville, Florida, USA.

Johnson, R., **Subedi, B. R.** (2006). *Uniform measurement scales developed for program evaluation*. Paper presented in the 2006 annual meeting of Florida Educational Research Association, November 15-17, Jacksonville, Florida, USA.

Subedi, B. R. (2005). *A demonstration of three-level hierarchical generalized linear model applied to educational research.* Unpublished doctoral dissertation. Florida State University, Tallahassee, Florida.

Swan, B., & **Subedi, B. R.** (2005). *Teacher preparation, certification and students' mathematics achievement in a large urban district*. Paper presented in the National Evaluation Institute, July7-9, Memphis, Tennessee, USA.

Swan, B., Dixon, J. K., & **Subedi, B. R**. (2005). *Middle-school teacher preparation, certification and students' mathematics achievement in a large urban district*. A Final Report. The Multi-University Reading, Mathematics and Science Initiative, Learning Systems Institute, Florida State University, Florida, USA.