

# 2018 - 2021 Process Data Focused Conference Presentations

## 2018

### International Meeting of the Psychometric Society

#### Individual Sessions

Zheng, X., Kim, Y.Y., & Broer, M. (2018, July). Comparing Self-Reported Perseverance with Behaviors Inferred from Process Data. Proposal submitted for the International Meeting of the Psychometric Society, New York City, New York.

### National Council on Measurement in Education (NCME)

#### Symposia

***Symposium on Students' Use of Response Time, Testing Behavior, and Performance in Digitally-Based Assessments***

Şahin, F., Qin, L. Caliço, T. (2018, April). Exploring the relations between students' time management strategies and test performance. Paper presented in Broer, M. (Chair). *Students' use of response time, testing behavior, and performance in digitally-based assessments*. Paper presented at the National Council on Measurement in Education (NCME) annual conference, New York City, NY.

Kim, Y. Y. & Circi, R. (2018, April). The Extended Time Accommodation (ETA) and Performance of Students with ETA. In M. Broer (Chair), *Students' Use of Response Time, Testing Behavior, and Performance in Digitally-Based Assessments*. Proposal submitted to the meeting of the National Council on Measurement in Education, New York City.

Beverly, T. & Kim, Y. Y. (2018, April). Identifying Rapid-Guesser Using Growth Mixture Models. In M. Broer (Chair), *Students' Use of Response Time, Testing Behavior, and Performance in Digitally-Based Assessments*. Proposal submitted to the meeting of the National Council on Measurement in Education, New York City.

## Individual Sessions

Circi, R., Broer, M. & Kim, Y. Y. (2018, April). Using timing data to evaluate differential warm up effects in NAEP. Proposal submitted to the meeting of *the National Council on Measurement in Education*, New York City.

**2019**

## National Council on Measurement in Education (NCME)

### Symposia

#### ***Symposium on Evaluating Test Speededness in NAEP Digitally Based Assessments***

Kim, Y.Y. (2019, April). Conceptual Framework and Overview of Speededness in NAEP. In F. Sahin (Chair). *Evaluating Test Speededness in NAEP Digitally Based Assessments*. Symposium conducted at the meeting of the National Council on Measurement in Education, Toronto, Canada.

Bezirhan, U. & Zheng, X., (2019, April). Applying CUSUM based Person Fit Statistics to Detect Speededness. In F. Sahin (Chair). *Evaluating Test Speededness in NAEP Digitally Based Assessments*. Symposium conducted at the meeting of the National Council on Measurement in Education, Toronto, Canada.

Ni, X., Hui, G., & Zheng, X., (2019, April). Detecting Speededness Using Change Point Analysis on Response Data. In F. Sahin (Chair). *Evaluating Test Speededness in NAEP Digitally Based Assessments*. Symposium conducted at the meeting of the National Council on Measurement in Education, Toronto, Canada.

Zhang, M., Zheng, X., & Hui, G. (2019, April). Detecting Speededness Using Change Point Analysis on Response Time. In F. Sahin (Chair). *Evaluating Test Speededness in NAEP Digitally Based Assessments*. Symposium conducted at the meeting of the National Council on Measurement in Education, Toronto, Canada.

#### ***Symposium on Testing Strategies, Extended Time Accommodation, and Speededness, Using Process Data in NAEP***

Kim, Y.Y., Circi, R., & Suk, Y. (2019, April). Effects of The Extended Time Accommodation (ETA) on Performance in NAEP Mathematics. In M. Broer (Chair). *Testing Strategies, Extended Time Accommodation, and Speededness, Using Process Data in NAEP*. Symposium conducted at the meeting of the National Council on Measurement in Education, Toronto, Canada.

Sahin, F. (2019, April). Exploring Examinees' Timing Behaviors and Performance in a Digitally-Based Mathematics Assessment. In M. Broer (Chair). *Testing Strategies, Extended Time Accommodation, and Speededness, Using Process Data in NAEP*. Symposium conducted at the meeting of the National Council on Measurement in Education, Toronto, Canada.

Zheng, X. (2019, April). Identifying Rapid-Guesser Using Growth Mixture Models. In M. Broer (Chair). *Testing Strategies, Extended Time Accommodation, and Speededness, Using Process Data in NAEP*. Symposium conducted at the meeting of the National Council on Measurement in Education, Toronto, Canada.

## Individual Sessions

Broer, M., Circi, R. & Kim, Y. (2019, April). *Digital familiarity and warm-up effects in NAEP 2017 Mathematics*. Paper presented at the meeting of the National Council on Measurement in Education, Toronto, Canada.

Hui, G., Circi, R., Lee, S., & Zhang, M. (2019, April). *Item Profiling: A Case Study of NAEP Grade 4 Mathematics Process Data*. Paper presented at the meeting of the National Council on Measurement in Education, Toronto, Canada.

Sahin, F., Hicks, J., Zhang, M., & Ji, C.S. (2019, April). *Exploring Perceived Time Pressure and Speededness Using NAEP Process Data*. Paper presented at the meeting of the National Council on Measurement in Education, Toronto, Canada.

## Training Workshops

Sikali, E. \*, Circi, R., Sahin, F., Zheng, X. (2019, April) NAEP Process Data. Training conducted at the meeting of the National Council on Measurement in Education, Toronto, Canada.

# The International Conference on Educational Data Mining (EDM)

## Individual Sessions

Hicks, J., Circi, R., & Li, M. (2019, July). *Students' Use of Support Functions in DBAs: Analysis of NAEP Grade 8 Mathematics Process Data*. Poster presented at the 12<sup>th</sup> International Conference on Educational Data Mining, Montréal, Canada.

# International Summit of Artificial Intelligence and Educational Big Data, Beijing, China

Şahin, F. (2019, August). The many hats in using process data in educational testing. Invited speaker for the Third International Summit of AI and Educational Big Data, Beijing, China.

## 2020

### American Educational Research Association (AERA)

#### Trainings/Workshops

Sikali, E. \*, Circi, R., Sahin, F., Zheng, X., Hicks, J., Lee, S., Calico, T. (2020, April) Analyzing NAEP Process Data Using R. Training conducted [Virtually] at the meeting of the 2020 American Educational Research Association.

### National Council on Measurement in Education (NCME)

#### Symposium on *Insights on Text-to-Speech as a Universal Design Feature: NAEP Mathematics Process Data*

Lee, S. (2020, August). Evaluation of the Text-to-Speech (TTS) Tool Using NAEP Process data. In J. Hicks (Chair). *Insights on Text-to-Speech as a Universal Design Feature: NAEP Mathematics Process Data*. Paper presented at the meeting of the 2020 National Council on Measurement in Education [Virtually].

Hicks, J. (2020, August). Exploration of TTS Using the Differential Boost Framework. In J. Hicks (Chair). *Insights on Text-to-Speech as a Universal Design Feature: NAEP Mathematics Process Data*. Paper presented at the meeting of the 2020 National Council on Measurement in Education [Virtually].

Circi, R. (2020, August). Exploring Read-Aloud Sentences to Understand Learners' TTS Use Tendency. In J. Hicks (Chair). *Insights on Text-to-Speech as a Universal Design Feature: NAEP Mathematics Process Data*. Paper presented at the meeting of the 2020 National Council on Measurement in Education [Virtually].

## Individual Papers

- Sahin, F. Hicks, J., & Ji, G. (2019, August). *Exploring Students' Perspective in a Digitally Based Assessment using Process Data*. Paper submitted to the meeting of the 2020 National Council on Measurement in Education, San Francisco, CA.
- Zheng, X., Wu, T., Kim, Y.Y., & Sahin, F. (2019, August). Using Response Time Modeling to Detect Speeded Examinees with Missing Responses. Paper submitted to the meeting of the 2020 National Council on Measurement in Education, San Francisco, CA.
- Liao, M. & Şahin, F. (2020, September). Investigating students' calculator use and computations using process data in mathematics assessment. Paper submitted to the meeting of the 2020 National Council on Measurement in Education, San Francisco, CA.

## Psychometrics Society (IMPS)

### Symposia

#### Symposium on *Process Data: Core Concepts and Practical Applications*

- Broer, Markus (2020, July). *Process Data: Core Concepts and Practical Applications* (Chair). Symposium presented to the virtual meeting of the 2020 Psychometrics Society (IMPS)
- Calico, Tiago (2020, July). *So You Think You Can Process: Ontological and Methodological Barriers to Incorporating Event Data in Psychometric Models*. Symposium presented to the virtual meeting of the 2020 Psychometrics Society (IMPS)
- Sahin, Fusun & Zheng, Xiaying (2020, July). *To Penalize or Not To Penalize Not-Reached-Items: Effects on Item and Ability Estimations*. Symposium presented to the virtual meeting of the 2020 Psychometrics Society (IMPS).
- Zheng, Xiaying (2020, July). *Using Response Time Modeling To Detect Speeded Examinees With Missing Responses*. Symposium presented to the virtual meeting of the 2020 Psychometrics Society (IMPS).

**2021**

# American Educational Research Association (AERA)

## Trainings/Workshops

Sikali, E.\*, Circi, R., Sahin, F., Zheng, X., Hicks, J., Lee, S., Calico, T. (2020, April). *The Future is Here: Fundamentals of Analyzing NAEP Process Data using R*. Training submitted to the meeting of the 2021 Virtual Annual American Educational Research Association.

Sikali, E.\*, Circi, R., Sahin, F., Zheng, X., Hicks, J., Lee, S., Calico, T. (2020, April). *Fueling the Future: Advanced Analyses of NAEP Process Data using R*. Training submitted to the meeting of the 2021 Virtual Annual American Educational Research Association.

# National Council on Measurement in Education (NCME)

## Symposia

### Symposium on *Diving into NAEP Process Data to Understand Students' Test Taking Behaviors*

Wang, N. & Circi, R. (2020, August). Revisiting Omit and Not-Reached Scoring Rule using NAEP Process Data. In J. Weeks (Chair). *Diving into NAEP Process Data to Understand Students' Test Taking Behaviors*. Symposium accepted to the meeting of the 2021 National Council on Measurement in Education, Baltimore, MD.

Morell, M., & Circi, R. (2020, August). Exploring Item Visits in Process Data and Modeling Students' Visit Behaviors and Intentions. In J. Weeks (Chair) (Chair). *Diving into NAEP Process Data to Understand Students' Test Taking Behaviors*. Symposium accepted to the meeting of the 2021 National Council on Measurement in Education, Baltimore, MD.

Liao, M. & Circi, R. (2020, August). Understanding Students' Problem-Solving Processes via Action Sequence Analyses. In J. Weeks (Chair). *Diving into NAEP Process Data to Understand Students' Test Taking Behaviors*. Symposium accepted to the meeting of the 2021 National Council on Measurement in Education, Baltimore, MD.

## Individual Papers

Qiao, X. & Hicks, J. (2020, August). *Exploring Answer Change Behavior Using NAEP Process Data*. Paper submitted to the meeting of the 2021 National Council on Measurement in Education, San Francisco, CA.

Sahin, F. (2020, August). *Scratchwork Tool Use Preferences of Students in NAEP Mathematics Assessment*. Paper submitted to the meeting of the 2021 National Council on Measurement in Education, San Francisco, CA.

Zheng, X., Wu, T., Kim, Y.Y., & Sahin, F. (2020, August). *Using Response Time Modeling to Detect Speeded Examinees with Missing Responses*. Paper submitted to the meeting of the 2021 National Council on Measurement in Education, San Francisco, CA.

Sahin, F. & Kuang, H. (2020, August). *Does disengagement vary across years? Comparison between years of PISA using process data*. Symposium submitted to the meeting of the 2021 National Council on Measurement in Education, San Francisco, CA.